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LABOUR MARKET ENTRY IN CONTEXT. INSTITUTIONS, SOCIAL INEQUALITIES AND THE EARLY OCCUPATIONAL CAREERS IN EUROPE

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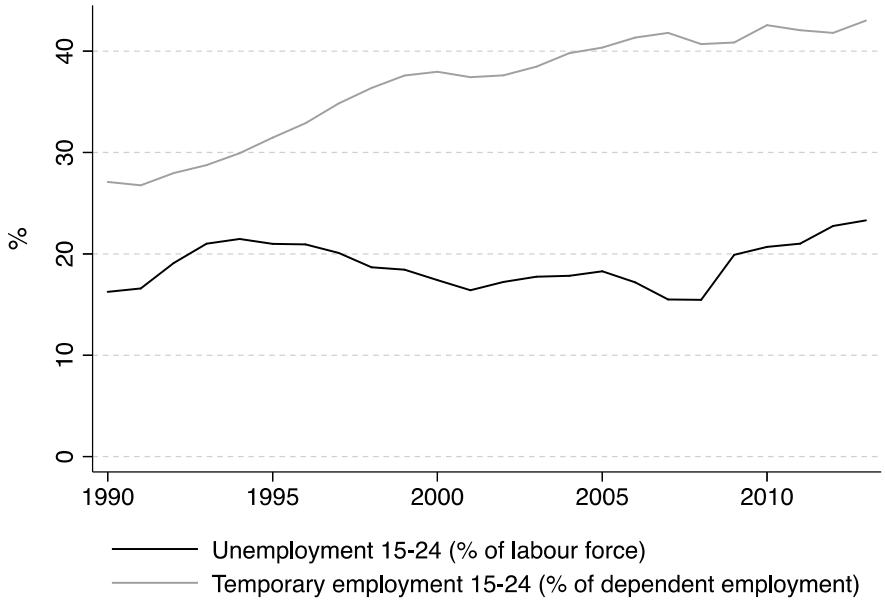
CHAPTER 1

INTRODUCTION AND THEORETICAL FRAMEWORK

1.1 The school-to-work transition: overview and definition

In all modern societies, the transition from education to employment is a fundamental step towards adult life. After leaving schools, young people are finally ready to apply skills and knowledge learned in formal education, in order to pursue an occupational career that meets their preferences and expectations – and, more generally – to pursue their life goals. Indeed, if the early stages of work life were not predictive of later life course development, the phase of transition from school to employment would not be so relevant (Bradley and Nguyen, 2004). However, great deals of economic and sociological literature have shown that a bad start into the labour market influences negatively later occupational careers (e.g. Barone and Schizzerotto, 2011; Gangl, 2006; Gregg, 2001; Luijkx and Wolbers, 2009), and future well being in general (Clark and

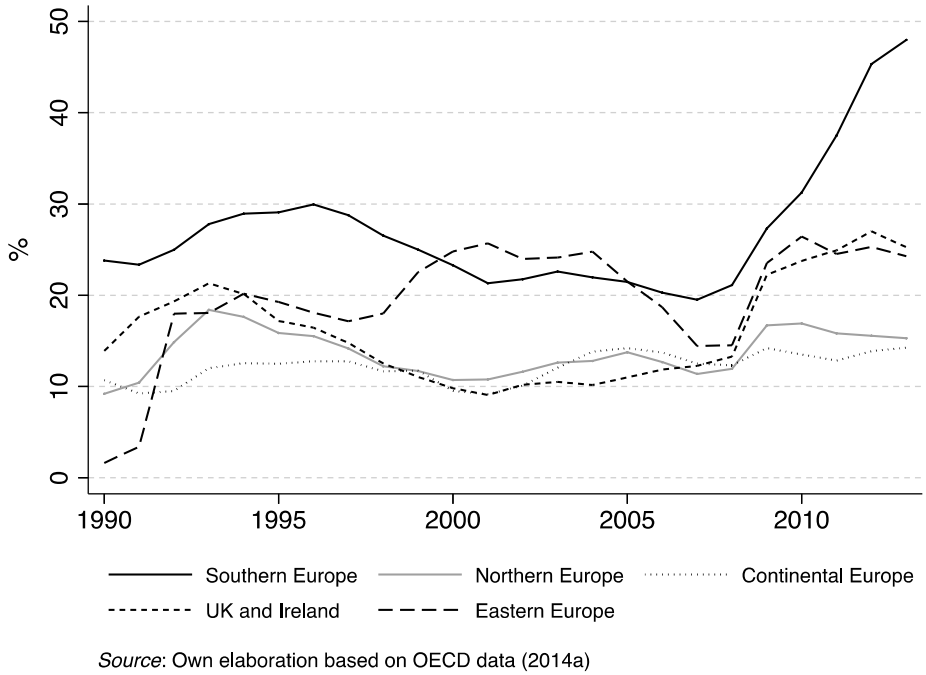


Source: Own elaboration based on OECD data (2014a)

Figure 1.1 – Youth unemployment and temporary employment rates in the EU–28

Oswald, 1994; Korpi, 1997). Moreover, transitions into employment are often connected with other key steps towards adulthood, such as leaving the parental home, getting married, and having children (Buchman, 1989; Buchman and Kriesi, 2001; Wolbers, 2007a).

Despite its importance, the school-to-work transition is far from being smooth in many developed countries. In 2007, about the 15 per cent of young aged 15-24 were unemployed in the European Union, and – among those who had a dependent employment – about the 40 per cent have a flexible contract (Fig.1.1). These figures are even exacerbated after the 2008 financial collapse and the 2010 sovereign debt crisis: nowadays about a quarter of young people in the European Union are unemployed, and even a greater proportion compared to earlier periods have a temporary employment. However, youth conditions differ considerably among European countries, as showed in Figure 1.2. In last two decades, youth unemployment rates were systematically higher in southern European countries compared to other areas, and this gap is even wider considering post-crises periods. On the other hand, countries from northern and



Source: Own elaboration based on OECD data (2014a)

Figure 1.2 – Youth unemployment rates by geographical areas in the EU–28

especially continental Europe seem to perform best and suffered the recent economic crisis to a minor extent.

Trends in aggregate youth unemployment and temporary employment rates even underestimate the deterioration of youth's integration into the labour market in recent years. Indeed, during the last decades we also assisted to a great differentiation and complexity of the early occupational careers of young people (Raffe, 2013; Ryan, 2001; Staff and Mortimer, 2008). Compared to earlier generations, individual trajectories from education to a stable and definitive employment are currently more complex, and are often constituted by a mixed sequence of events that includes education, training, employment, and unemployment spells (Brzinsky-Fay, 2007; Mayer, 2005).

The growing complexity of early occupational careers challenges the attempts to define and study the school-to-work transition in terms of one, clear-cut, and definite 'transition' (Kerckhoff, 1995, 2000; OECD, 2000). Sociologists and economists have long dealt with this issue, providing different answers, but none solution. In fact, even if there is general agreement about the need to consider the transition from education to employment as a 'period' instead of a 'single event' (Hillmert, 2002), there are great discrepancies about the boundaries encompassing this period.

From a theoretical viewpoint, the school-to-work transition is generally defined as the period between the end of compulsory schooling (or initial education) and the stable settlement into the labour market (Bradley and Nguyen, 2004; Müller and Gangl, 2003; OECD, 1996, 1998; Ryan, 2001). However, empirical studies have typically focused on a stricter time-span, by considering the 'school-to-work' as the period between the end of the last educational experience and the first significant employment (e.g. Allmendinger, 1989; Kogan and Müller 2003; Kogan *et al*., 2011; Shavit and Müller 1998; Wolbers, 2007b).[1] In this thesis, I adopted an intermediate perspective, by

[1] The main problem of this strategy is to define 'the last educational experience' and the 'first significant job' in a way that allow comparisons across countries (Raffe, 2013; OECD, 2000). However, compared to the first definition – that lets transitions start after the end of compulsory schooling – the latter definition makes educational choices after compulsory schooling exogenous, thus narrowing the analytical focus.

defining the 'school-to-work' transition as the period between the main branching point in the individual educational path and the first 10-15 years on the labour market. Therefore, the focus of the thesis is on the transition from school to the first employment and on the early career progression of young Europeans.

1.2 The transition from education to employment as a job-allocation problem: micro and macro perspectives

The process of transition from education to employment can be generally depicted as a process of assignment of school-leavers to jobs. On the one hand, once left school, individuals are likely to search adequate jobs with respect to their level of schooling, aspirations, preferences, and needs. On the other hand, employers are constantly filling in vacancies by recruiting job seekers – or by reshuffling their current employees – with the very clear intention to hire the most suitable candidate for the vacant positions.[2] In this setting, a match occurs when a job seeker – a school-leaver in the specific case – and an employer convey in establishing an employment relationship. From this point of view, the transition from school to employment can be firstly conceived as a micro-level process in which individuals take decisions according to their opportunity structures, preferences, and needs (Kalleberg and Sørensen, 1979; Logan, 1996; Sørensen and Kalleberg, 1981).

However, individuals do not act in a vacuum. On the contrary, employers and school-leavers are embedded in social, economic, and temporal context. Macro-level factors – e.g. welfare regimes, the overall state of the economy, the legislative arrangement, the political climate – come into play by influencing preferences, needs, expectations, and more generally the whole opportunity structures of both employers and school-leavers, thus influencing their decision-making processes (Kerckhoff, 1995; Müller, 2005; Müller and Gangl, 2003).

[2] It is worth noticing that the most suitable candidates are not necessarily the ones with the highest level of education or abilities. Indeed, criteria of suitability are strictly dependent on preferences, strategies, and needs of specific employers.

Therefore, the analysis of the processes of transition from education to employment requires necessarily a macro-micro perspective that takes into account the interactions between the two analytical levels. In what follow, a brief – and not exhaustive – discussion of the main research questions arising from the focus on the school-to-work transition from a micro and a macro perspective is provided.[3]

1.2.1 The focus on the micro level

The overall outcome of the allocation process of school-leavers to jobs is reflected in the social stratification of the transition processes in terms of personal characteristics and resources, such as – just to make few examples – gender, level of education, work experience, ethnic and parental background (Kerckhoff, 1995; Müller, 2005; Müller and Gangl, 2003). Therefore, a micro level perspective normally raises questions about individual traits and assets that influence the first stages of occupational careers. Are men advantaged compared to women? Does education pay off? Are work experiences acquired during education useful in the job search process? Are foreigner disadvantaged compared to natives? Does social background affect early labour market careers?

All these questions are at the core of the economic sociology, the sociology of education, and the sociology of the labour market. However, in a first moment, research was driven by idiosyncratic interests and anchored at the national level (Raffe, 2013). In this regard, a huge body of literature on single national contexts has shown that personal characteristics matter when entering the labour market (see, among others, Bradley and Nguyen, 2004 for a review of studies in UK and US; Cobalti and Schizzerotto, 1994 for Italy; Blossfeld, 1987 for Germany; Wolbers, 2000 for the Netherlands). The debate on 'inequality of opportunities' – especially as regards the effects of social origins on occupational attainment – offered a natural framework to analyse the school-to-work transition, given the importance of this phase for labour market success later in life

[3] Next two paragraphs should not be intended as a 'previous research' section. Instead, the aim is to show the main research questions that arise from the focus on the micro or the macro level, and the main approach used when dealing with a macro perspective.

(Raffe, 2013). In fact, a significant part of early studies on the school-to-work transition within single national contexts was conducted under the broad framework of social stratification and intergenerational mobility research, that put particular emphasis on the effect of social origins on educational attainment, and, in turn, on the subsequent labour market outcomes (the so-called OED association – origin, education, destination).

The development of life course research and the availability of national longitudinal data pushed further the analysis of the transition from school to employment as a micro-level process (see Mayer, 2009; Mayer and Tuma, 1990; Mortimer and Shanahan, 2003). In fact – by examining the school-to-work transitions as sequences of individual events in single national contexts – the life course perspective enriched the set of labour market outcomes under investigation, placing particular emphasis on outcomes such as mobility across jobs, or among periods of employment, inactivity, unemployment, and further education – as well as the duration of single episodes.[4]

1.2.2 The focus on the macro level

Employers' and school-leavers' choices are however influenced by macro-level factors that are not only antecedent to them but also out of their direct control, such as the political climate, the institutional arrangement, the welfare regime, and the state of the economy.[5] The focus on the macro-level entails two different sets of research questions.

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[4] The emphasis on the duration of the single episodes is pivotal. For example, reliable data on the duration of unemployment spells integrates information on flows 'in and out' of unemployment, thus allowing us to evaluate more correctly the immediate and the potential long-term negative consequence of being in unemployment in early career. In fact, high unemployment rates are not necessary a problem for individuals if flows 'in and out' of unemployment are also high, whereas low unemployment could be extremely problematic when flow 'in and out' are low and unemployment spells long (Ryan, 2001).

[5] It is assumed that macro-conditions – such as economic conjuncture and the institutional setting – are exogenous to employers' and school-leavers' actions, at least in the short run.

On the one hand, a pure macro perspective conceives the school-to-work transition as macro-level process, and raises questions about the role of the above-mentioned factors in shaping the transition processes at the aggregate level. Some examples of research questions rising from this perspective are the following. Does the alignment of political systems encourage a smooth transition from education to employment? Are vocationally oriented educational systems more efficient in structuring the flows of school-leavers into the labour market? Do deregulated labour markets favour the integration of young people into the labour force? Is globalisation responsible for the diffusion of fix-term contracts in early occupational careers?

On the other hand, the interest in the macro-level is also reflected in an intermediate perspective focused on macro-micro interactions. Such perspective raises questions about the role of macro-level factors in moderating the effect of individual traits and resources on early labour market careers. Does the vocational orientation of the education systems affect the gender wage gap in the early career? Does the level of employment protection account for variations in the effects of social origins on occupational attainment? Does the effect of education on labour market entry vary according to labour market arrangements? Does the size of the ethnic penalty depend on the overall economic climate?

The attempts to answer these questions have naturally lead to cross-country comparisons, to the extent that national contexts are characterised with different institutional, political, and economic conditions, and a high degree of internal homogeneity.[6] Therefore – as noted by Raffe (2013) – from the late 80's on we assisted to a 'comparative turn' in transition research, that started to describe and explain how and why transition processes differ among countries. In a similar vein to what happened to studies anchored at the national level, also the 'comparative turn' in transition research largely reflected the interest of intergenerational mobility and status attainment

[6] The degree of internal homogeneity with respect to macro-level characteristics is likely to vary cross-nationally. However, for the sake of simplicity, I assume that all countries are internally homogeneous with respect of the main contextual characteristics.

research in the cross-country variation of the OED association (see Breen and Johnson, 2005).

In the last two decades, comparative transition research has spread and – from time to time – touched upon different aspects of transition, countries, and macro-level characteristics. Despite these sources of variability, two approaches to cross-national comparison can be identified.

The first approach considered macro characteristics only on a theoretical level, by comparing small but theoretically relevant number of countries at a time and forgo empirically accounting for the effects of macro-level factors (e.g. Allmendinger, 1989; Bernardi *et al.,* 2000; Kogan *et al.,* 2011; Marsden and Germe, 1991; Scherer, 2004; van de Werfhorst, 2004). The milestone of this approach is the edited volume *From School to Work* by Yossi Shavit and Walter Müller (1998), which analysed in a common scheme the association between education and the first occupation in 13 countries using national datasets.

The second approach typically compared national contexts using cross-national datasets, and in some cases attempted to model empirically the effects of macro-level characteristics (e.g. Breen, 2005; de Lange *et al.,* 2013; Kogan and Müller, 2003; Verheast and Van der Velden, 2012; Wolbers, 2007b). The best example of this approach is the edited volume *Transition from education to work in Europe* edited by Walter Müller and Markus Gangl (2003), which described cross-country variations in different aspects of transition processes, and tried to explain empirically these differences by the macro-level arrangements.

Both approaches have strengths and deficiencies that is not appropriate to underline at this stage. Rather, it is worth noticing that – all in all – previous research focused on a core set of macro-level dimensions. A crude classification of these macro-level characteristics distinguishes among cyclical, structural, and institutional factors (de Lange *et al.,* 2014; Wolbers, 2007b; van der Velden and Wolbers, 2003). Generally, cyclical factors refer to the overall economic climate (e.g. unemployment rates), whereas structural factors refer to some general trends affecting all developed countries (e.g. globalisation, educational expansions, demographic dynamics). Lastly, institutional

factors typically denote the arrangements in the labour markets (e.g. the employment protection legislation or the economic structure) and in the education systems (e.g. level of standardisation, tracking and vocational orientation).

1.2.3 Where are we? Research questions

This thesis focuses on the process of transition from education to employment from a macro-micro perspective. More specifically – given the distinction among cyclical, structural and institutional factors – this work will mainly investigate how *institutions* influence the micro-level process of allocation of school-leavers to jobs.[7] A comparative perspective will be adopted, in order to disentangle theoretically – by means of examples – and parametrically – by means of statistical modelling – the institutional influence on the first stages of occupational careers of young school-leavers. Therefore, the thesis will combine the two classic approaches to comparative research described in the previous section.

In order to provide a comprehensive view of the school-to-work transition, this thesis investigates the influence of the institutional sphere both on the first labour market entry and on the occupational progression beyond that point, with a particular emphasis on the emergence of social inequalities at early career stages and their evolution over the early life course. In particular, my three research questions touches upon three main aspects of the school-to-work transition, and are the following:

1) *How do institutions influence the transition from education to the first employment?*
2) *How do institutions influence the occupational progression of those entering the first employment in a temporary position?*
3) *How do institutions influence the evolution of social inequalities emerging at labour market entry over the early life course?*

[7] Although the main focus is on the role of institutional characteristics, the role of structural characteristics is considered as well in the empirical chapters.

The first research question regards the influence of institutions on the transition from education to the first significant employment. While previous studies focused mainly on consolidated measures of the youth integration into the labour market – such as unemployment and temporary employment probabilities vis-a-vis with permanent employment – the interest here is on other complementary outcomes, such as the speed of entry into the first significant employment and its overall quality (in terms of prestige).

The second research question regards the institutional determinants of the occupational progression beyond the first labour market entry. More specifically, the interest is on young people who fail in entering their first significant job in a permanent position, i.e. on those youngsters whose early careers may be more prone to disruption. Therefore, the early career developments of youngsters who experienced a flexible labour market entry are analysed looking at two outcomes reflecting their chances of integration into the primary segment of the labour market, i.e. the chances of occupational and contractual mobility.

The third research question regards the role of the institutional context in moderating the effect of social origin on occupational destinations over the early life course. In particular, the interest here is on a pure form of inequality related to family background, i.e. the influence that social origin plays beyond what is mediated by educational attainment (often referred to as the 'direct' effect [see Ballarino and Bernardi, 2016]). More precisely, this work questions whether a direct effect of social origin emerges already at the onset of the career, and whether this direct effect increases, decreases, or remains stable over the early life course. Emphasis is posed on the institutional conditions favouring the different scenarios.

1.3 Institutional regimes: a useful analytical concept

When dealing with the role of institutions in shaping individual actions and outcomes, one should bear in mind that institutions do not act in isolation. Indeed, the influence of the macro-institutional context on individuals' decisions is the result of the

interplay among different institutional spheres. In this perspective, institutional systems are conceived as «interwoven arrangements with high degree of internal complementarity» (Bucholz *et al.,* 2009, pp. 67). For this reason, a good starting point to analyse the role of specific institutions on the school-to-work transition is to consider the overall 'logics of functioning' of what have been called 'transition systems' (Raffe, 2008, 2011), or 'transition regimes' (Walther, 2006). I will denote these ideal typical overall institutional arrangements in terms of *institutional regimes*. Anyway, I am aware that in many cases these classifications are constructed *ex post* by clustering core groups of countries (often two countries only) on the basis of transitions outcomes and institutional consonance, thus resulting well suited to describe rather than explain the patterns of entry into the labour market. Therefore, the reference to institutional regimes and their overall 'logics of functioning' (see Raffe, 2008, 2011) will be merely instrumental to explain the ways some institutional features could affect the first stage of occupational career of young people, and eventually to identify some other potentially relevant institutional characteristics overlooked or oversimplified in previous research.

Among the many classifications of institutional regimes, the distinction between *internal* and *occupational labour market systems* (Marsden, 1986, 1990), and the distinction between *liberal* and *coordinated market economies* (Hall and Soskice, 2001) are of specific interest.

1.3.1 Internal versus occupational labour markets

A consolidated distinction between institutional regimes divides countries in *occupational labour market systems* (hereafter: OLM) and *internal labour market systems* (hereafter: ILM) (Doeringer and Piore, 1985; Blossfeld and Mayer, 1988; Marsden, 1986, 1990, 1997, 1999; Maurice *et al.,* 1986).[8] These two kinds of system

[8] Some scholars refer to the dichotomy between *internal* and *occupational labour market* (e.g. Marsden, 1990), whereas others refer to the dichotomy between *organizational* and *qualificational spaces* (e.g. Maurice *et al*., 1986; Shavit and Müller, 1998). However, the two

differ both in the schools arrangements – which provide skills – and the labour markets – which demand such skills. In OLM, the educational systems provide students with highly standardized and reliable vocational qualifications. In these contexts labour market is segmented by occupations, since jobs are mainly defined by contents and the skills required to perform a job are provided within schools. On the contrary, in ILM, the educational systems do not provide students with vocational competencies and skills, but provide them with general qualifications. In these contexts, labour markets are segmented by firms, since vocational training mainly takes place on-the-job and within the same firm (Doeringer and Piore, 1985).

The settings of educational systems and the structures of labour markets in OLM and ILM are directly related to some facets of the school-to-work transition via mechanisms by which employers hire workers (Gangl, 2003a). These mechanisms differ between OLM and ILM, since employers rely on different signals to evaluate job applicants. In OLM, the labour force has specific vocational qualifications and skills, and thus employers will use educational credentials as reliable signals for screening applicants. Conversely, in ILM, educational qualifications are general and not related to the contents of jobs, and thus employers will be more likely to evaluate the expected productivity of applicants – or the expected training costs – by looking also at their work experience.

In these terms, the ILM/OLM distinction implies specific hypotheses about the integration of young people into the labour market (Gangl, 2003a). In ILM, job allocations will largely depend on previous work experience, and to the extent that school-leavers lack – by definition – work experience, they will be systematically disadvantaged in the first stages of their occupational careers. Conversely, in OLM, the lack of work experience is less problematic, since job allocations rely on vocational certificates, and thus school-leavers have more chances to compete with more experienced workers. Therefore, broadly speaking, the school-to-work transition should be smoother in OLM than in ILM systems (Maurice *et al*., 1986).

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distinctions are largely overlapping and the main arguments are quite similar. Therefore, in the text, I will exclusively make reference to the ILM/OLM dichotomy.

The smoothness of the transition in OLM should entail a *faster* transition into the first job, a *better* initial placement, and *more stable* labour market position in terms of occupational and contractual mobility in the early career. In OLM, transitions will be faster compared to ILM to the extent that employers can easily screen among applicants looking at their educational credentials, and future adjustments are less likely to occur (Kogan and Unt, 2008; Scherer, 2005). Moreover, in OLM, standardized educational qualifications entail a better initial job-skills match and therefore a better occupational position at labour market entry. In turn, better job-skill matches at the onset of the career reduce occupational mobility afterwards (Gangl, 2003a; Müller and Shavit, 1998).

Conversely, in ILM, transitions will take longer because training on-the-job is widespread, and thus employers will accurately screen among applicants to reduce the initial training costs. In addition, in ILM, the job-skill match is more gradual and employers will always prefer experienced workers, and therefore school-leavers will enter the labour market in relatively low occupational positions. However, job mobility is likely to be high in initial individual careers, to the extent that increasing work experience entails increasing job-skill match (Kerckhoff, 1995; Marsden and Ryan, 1995).

The ILM/OLM distinction implies also a general hypothesis about the evolution of the direct effect of social origin on occupational attainment over the early life course. As stressed above, the high job-skills match at labour market entry in OLM implies no need for adjustments afterwards, and results in low level of early career mobility. Therefore, in OLM, the likelihood young people will change pathways once entered the labour market is rather limited. For this reason, inequalities related to social origin at the onset of the work life are likely to remain rather stable over the early occupational career.

Conversely, in ILM, the comparatively higher levels of early career mobility leave more room for accumulation or compensation of initial inequalities over the life course. On the one hand, accumulation may occur to the extent that offspring from better-off families enjoy not only a better placement at labour market entry compared to offspring

from worse-off families, but also greater rates of early career progression. On the other hand, compensation may occur to the extent that offspring from less-advantaged families grow faster compared to their counterparts from advantaged families, for example, because the market tends to adjust initial mismatches based on non-meritocratic principles.

1.3.2 Liberal versus coordinated market economies

Another meaningful distinction among institutional regimes is to classify countries as *liberal market economies* (hereafter: LMEs) versus *coordinated market economies* (hereafter: CMEs) (Hall and Soskice, 2001). This distinction is framed within the 'varieties of capitalism' school (hereafter: VoC), a broad theoretical approach that is interested in the overall institutional configurations and complementarities among institutions (Estevez-Abe *et. al* 2001; Hall and Soskice, 2001; Iversen 2005; Iversen and Soskice, 2001; Thelen, 2004). The distinction between LMEs and CMEs takes into account the features of educational and training systems, as well as the labour market structure. However, the VoC argument pays also great attention to the role of national employment protection legislations.

In the VoC approach, the main feature on which countries are categorized is the nature of the *coordination* between firms and other economic actors. The modes of coordination are pivotal since coordination affects the willingness of firms and job seekers to invest in skills that are more or less portable across firms (Cusack *et al.*, 2006; Estevez-Abe *et. al* 2001; Hall and Soskice, 2001; Iversen and Soskice, 2001). Since the investment in specific (non-transferable) skills is risky for both employers and workers, it is not likely to occur unless it is somehow protected, e.g. by suitable institutional settings (Ostrom, 1990). In turn, the propensity to invest in general (transferable) or specific (non-transferable) skills directly influences the production strategies of firms.

In LMEs, coordination depends exclusively on market dynamics, and employee-employer relationships are not protected by national legislations. This arrangement

makes it more profitable and rational for firms and workers to invest in general (transferable) skills, since there are virtually no limits in the creation and destruction of jobs. In turn, the investment in general skills induces a mode of production based on *radical innovation* since occupational mobility is higher, the hierarchical structure more definite, and decision-making processes of managers more wide-ranging. In these contexts, education and training systems are required to provide general skills, in order to ensure a comparative advantage to firms that pursue radical innovation. Thus, LMEs typically combine a more academically oriented education system with a narrower on-the-job training.

On the contrary, in CMEs, coordination relies also on non-market forms of bargaining and collaboration between the organization of companies, unions, and work councils. Moreover, in this setting, the protection of employment relationship is high due to stringent employment protection legislation. This mode of coordination protects the investment in specific (non-transferable) skills and makes it more profitable for both workers and firms to invest in such competencies. In turn, this propensity leads to a mode of production based on *incremental innovation*, since worker-employer relations are longer, skill specificity higher, inter-firms collaborations greater, and production processes more stable. In these contexts, the educational systems provide specific and occupational skills, in order to allow firms to pursue strategies based on incremental innovation.

While the VoC approach offers a sophisticated explanation for self-sustaining institutional configurations among countries, it pays less attention to the influence of institutional configurations on the micro mechanisms that influence the school-to-work transition. However – similar to the OLM/ILM dichotomy - the VoC argument implies also a general hypothesis about the position of school-leavers in their early careers.

The overall institutional arrangement in LMEs is likely to be associated with *faster* but *less stable* transitions compared to CMEs. Namely, transitions from education to the first job are more rapid, but lead to job positions that are held for shorter periods. In LMEs, rapid entries into first jobs are ensured by low employment protection, which allows employers to reduce the screening of applicants to the extent that employers can

easily fire workers (Kogan and Unt, 2008; Scherer, 2005). However, low employment protection implies great turnover for the whole workforce and more mobility in general. This dynamic is exacerbated for young school-leavers, who in these settings do not have occupational skills and are likely to move on the occupational ladder once the right job is found. In fact, in these settings, initial good job-person match require more time, since the channelling function of education is low. Anyway, in LMEs, labour force mobility is not a problem to the extent that both employers and school-leavers are likely to invest in general and portable skills, so that employers can easily replace workers in case of defections, and workers can easily find new jobs in case of lay-offs.

Conversely, in CMEs, school-to-work transitions are supposed to be *slower* but *more stable* when compared to LMEs. Namely, transitions from education to the first job take longer time, but lead to job positions which are held for longer periods, thus implying low levels of early career mobility. In fact, in CMEs, the strict employment protection legislation induces employers to accurately screen applicants, thus increasing the time school-leavers need to find a first job (Scherer, 2005; Kogan and Unt 2008). However, once school-leavers find jobs, these jobs are likely to be stable to the extent that the relationships with employers are legally protected. Moreover, both employers and workers have few incentives to break off the employment relationships, since they have invested in specific and narrow skills that are not portable across firms and sectors.

Differences in the levels of early career mobility in LMEs and CMEs are also pivotal to derive hypotheses regarding the life course evolution of social inequalities that may be visible at labour market entry.

As for OLM, also in CMEs there are few incentives to occupational mobility, since there is a tight link between education and occupation and the protection of employment is high. Therefore, in these contexts, the low extent of occupational mobility does not leave any room for compensation or accumulation of the initial disadvantage over the early occupational career. Here, the direct effect of social origin on occupational attainment at labour market entry is likely to remain more stable over the early life course. Conversely, in LMEs, the low restrictions to career mobility leave more room for either accumulation or compensation of the initial social inequalities, depending on

whether offspring from better- or worse-off families enjoy faster rates of early career progression.

1.3.3 The explanatory power of existing taxonomies

The ILM/OLM and LME/CME dichotomies offer powerful tools for framing the school-to-work transition in comparative perspective. Table 1.1 and Table 1.2 show the classifications of countries along the ILM/OLM and the CMEs/LMEs taxonomies according to the main scholars within each theoretical approach. The two classifications are only partly overlapping, since they are based on different classification criteria.[9]

Generally, countries such as the United Kingdom, Australia, United States, and Ireland are grouped within the ILM systems as well as in LMEs. Indeed, these countries

Table 1.1– Classification of countries along the ILM/OLM dichotomy

ILM	OLM
Australia, United Kingdom, United States, Ireland, Japan, France	Austria, Denmark, Germany, The Netherlands, Sweden

Source: Marsden (1986, 1990, 1999)

Table 1.2 – Classification of countries along the LMEs/CMEs dichotomy

LMEs	CMEs
Australia, Canada, Ireland, United Kingdom, United States	Austria, Belgium, Denmark, Finland, France, Germany, Japan, The Netherlands, Norway, Sweden, Switzerland, Italy

Source: Hall and Soskice (2001), Busemeyer (2009), Busemeyer and Trampush (2012), and Estevez-Abe *et al.* (2001)

[9] The ILM/OLM dichotomy is based on the vocational orientation of the educational systems and the firm-based/occupational-based segmentation of the labour market. The LMEs/CMEs dichotomy relies on the different forms of coordination among economic actors. The two distinctions are only partly overlapping, and also lead to some contradictory predictions regarding the process of entry into the labour market (see par. 1.3.1 and 1.3.2). However, for the purpose of this thesis, is not necessary to analyse in depth similarities and contradictions between the two dichotomies. Rather, it is more fruitful to underline the common shortcomings of the ILM/OLM and LMEs/CMEs distinctions.

combine generalist educational systems, production strategies based on radical innovation, and market-based systems of coordination among economic actors, e.g. a loose regulation of employee-employer relationships and a weak welfare state. Conversely, Continental and Nordic European countries are generally grouped within OLM systems and CMEs. In these countries, educational systems are more vocationally-oriented, labour markets are more segmented by occupations, and coordination among economic actors based on non-market forms of collaboration – e.g. due to strict employment protection legislation.

However, both distinctions are far too parsimonious and hide wide heterogeneity within each group of countries (Allen, 2007; Gallie, 2007; Gangl, 2003a; Gangl *et al.*, 2003; Müller, 2005; Tåhlin, 2009). Moreover, both ILM/OLM and LMEs/CMEs dichotomies have been incapable of classifying some national contexts based on theoretical reasons – for example, Southern European countries.

On the one hand, the OLM/ILM distinction does not account for institutional configurations of countries such as Spain, Italy, Greece, and Portugal, which are indeed characterized by a mixture of features belonging to OLM and ILM (Gangl, 2000, 2001, 2003a; Müller, 2005). On the other hand, the VoC approach forces some southern European countries in the CMEs category relying on the strong role of employment protection legislation, even if these southern European countries have very different – and lower – macroeconomic performance compared to other CMEs. Yet, great heterogeneity can be found among other CMEs based on the agencies actually providing vocational and general skills, i.e. schools, professional orders, or firms (Busemeyer, 2009; Busemeyer and Trampusch, 2012).

These shortcomings are even more apparent when the modes of school-to-work transitions are considered. In fact, school-to-work transitions have proved to be far more difficult in southern Europe than in other European contexts, irrespective of the OLM/ILM or LMEs/CMEs distinctions. For example, school-leavers from southern European countries face higher unemployment risks (Müller, 2005) and longer job-search periods (Scherer, 2005; Wolbers, 2007b), are more likely to be trapped in initial unsatisfactory job positions (Scherer, 2004), and have much more difficulties in finding

stable employment (Barbieri and Scherer, 2009; Reyneri, 2005; Schizzerotto, 2002). Figure 1.2 in the first section of this chapter provides further evidence for this claim.

Moreover, also the labour market prospects of young people within the ILM and the LMEs categories differ considerably. For example, the only European countries classified as LMEs – Ireland and the United Kingdom – perform very differently with respect of consolidated measures of youth integration into the labour market, such the youth unemployment rate and the share of young people in temporary employment (see Figure A1 in the Appendix). Yet, recent research has shown how France and Germany – the two polar cases used to exemplify the ILM/OLM distinction ('organisational vs qualificational spaces') by Maurice and colleagues (1986) – are indeed much more similar than expected when education-occupation linkages are measured in terms of heterogeneity of occupational destinations (DiPrete *et al*., 2016).

Based on the empirical evidence that school-to-work transitions are more difficult in southern European contexts and that great heterogeneity exists among the other country groupings, several authors have suggested more articulated taxonomies. For example, Gangl (2001, 2003a) suggests classifying South Europe as an *ad hoc* group of countries *vis-à-vis* with OLM and ILM. The rationale behind this classification is that – compared to OLM and ILM – Southern European counties are characterised by low levels of educational attainment and the provision of very limited vocational skills at school. A similar classification can be found in more recent developments of the VoC literature, where Mediterranean countries are included in *ad hoc* group of countries – the so-called 'Mixed Market Economies (MMEs)' – on the basis of their low degree of institutional consonance (Hall and Gingerich, 2004; Molina and Rhodes, 2007). However, although Brzinsky-Fay's (2007) sequence analysis provide evidence for the robustness of these threefold classifications, it can be argued that these taxonomies are more suited to *describing* patterns of labour market entry in Europe, whereas less attention is devoted to *explaining* why these patterns occur. Other taxonomies suffer the same problem of *ex post* rationalisation and – akin to the above-mentioned threefold classifications – do not offer insights to explain the peculiar conditions of southern

Europe and the wide variability within the other country groupings (e.g. Walther, 2006; see Raffe, 2011 for a review).

1.3.4 Some overlooked issues

The lack of explanatory power of existing taxonomies is likely connected to the simplistic view of the role of some institutions and to the omission of other potentially relevant institutional characteristics.

First of all, both the ILM/OLM and the LMEs/CMEs distinctions overlooked an important institutional feature: the regulation of product and service markets. This institutional feature refers to legal restrictions regarding the supply of goods and services within national economies, entailing state regulations and corporatist barriers upon entry as well as bureaucratic controls over investments, entrepreneurship, prices and fees (OECD, 2014b). As will be argued in detail, this kind of restrictions may have a wide relevance for market dynamics in general, and for both the efficiency and equality of the job-allocation processes in the early career.

Second, the role of employment protection legislation is overlooked in the case of the ILM/OLM distinction, whereas it is probably oversimplified in the VoC literature. Following the VoC argument, firms do not need flexibility and indeed profit from a strong employment protection in CMEs. However, in the real world, also firms in CMEs – such as Germany or Austria – require some flexibility to cope with short-term fluctuations in the labour demand, especially after the structural changes occurred in the globalised economy. In strongly regulated and strongly unionised labour markets – such as in CMEs – this flexibility was mainly obtained by deregulating the use of fixed-term contracts and other forms of atypical employment, but leaving standard contracts largely unchanged (Barbieri, 2009). As will be argued, a high differential in the extent to which standard and fixed-term contracts are legally protected is one of the main source of labour market segmentation in the European context, and may have a strong impact on the extent and the quality of career mobility after the first job entry.

Third, existing taxonomies understate the 'ambivalent' role of trade unionism. In particular, the VoC approach mainly conveys a somewhat positive view of unions. Indeed, in the VoC approach, unions ensure the matching between the specific skills provided by the educational systems and required by the modes of production, and protect the investment in such skills by sustaining strong employment protection legislations. However, unions are likely to defend more strongly the interest of specific social groups, thus contributing to segmentation within labour markets (Lindbeck and Snower, 1989). As will be discussed in detail, strong unionism is likely to affect the degree of occupational mobility in the early career by supporting rigid labour legislation and supporting insiders. However, depending on historical circumstances, unions may tolerate processes of flexibilisation in the market domain, thus playing a complex and counter-intuitive role in different countries and periods.

1.4 Some new insights on the role of the institutional context

The literature has examined theoretically the influence of institutions on the school-to-work transition by considering the type of skills provided and required by the educational systems and the labour markets, and the level of coordination among economic actors, especially as regards the protection of worker-employment relationships. In this thesis, I will partially reconsider the role of the institutional features that have been identified in the literature, and will additionally consider the effect of relevant institutional traits previously not examined in depth.

An exhaustive discussion of all potentially relevant institutional features is clearly out of the scope of this dissertation. Rather, the focus here is on some institutional characteristics that may affect the process of entry into the first employment, the chances of career progression after the first job entry, and the chances that social inequalities at the career beginning strengthen or weaken with career progression. Three issues seem particularly promising for these purposes: i) the national regulations on product and service markets; ii) the strictness of employment protection legislation, but

framed in the context of the 'partial and targeted' forms of deregulation that have been implemented in the European context; iii) and the 'ambivalent' role of trade unionism.

As anticipated in the previous section, the regulation of product and service markets refers to restrictions regarding the supply of goods and services within national economies. The little attention given to this institutional characteristic by sociological studies is surprising, given that it may impact on economic performances in general, and on the youth integration into the labour market in particular. Broadly speaking, strong regulations on product and service markets reduce the overall level of mobility of the workforce. Strict restrictions in the product market domain indeed dampen the aggregate labour demand, and decrease the number of vacancies available in the external labour market (Amable and Gatti, 2004; Nickell, 1999). This dynamic reduces the outside-option of workers, thus increasing job stability (Amable and Gatti, 2004). In turn, reduction of vacancies and low job turnover stifle the chances of job seekers to (re)enter the labour market quickly. These difficulties are particularly pronounced for young school-leavers, to the extent that they are outsiders compared to more experienced job seekers who have already entered the labour market during their lives (De Vreyer *et al.,* 2000; Wolbers, 2007b). Moreover, strong product and service market regulations discourage the creation of low-skilled jobs in the service sector, especially in women-dominated fields (Krugman, 1994; Pissarides *et al*., 2005). While potentially reducing the overall employment chances for young people, this latter dynamic should account for an upgrading of the occupational structure in the long term, and may result in higher job-quality for those youngsters who manage to find employment.

The influence of product and service market regulations on the overall level of job mobility may also have important consequences in terms of 'life course stability' of social inequalities that emerge at labour market entry. On the one hand, high restrictions to career mobility – favoured by strong product market regulation – should prevent that offspring from better-off families take further advantage from career progression compared to offspring from worse-off families, or *vice versa*. On the other hand, lower restrictions to career mobility – favoured by low regulations on the product market –

leave more room for either accumulation or compensation of the initial disadvantage over the early life course.[10]

The taxonomies developed to identify institutional regimes have considered the role of labour market regulation, notably in terms of the strictness of national employment protection legislations. The attention given to this institutional characteristic is reasonable, since the overall level of employment protection may have important consequences for the process of entry into the first employment. In fact – due to strict regulations in hiring and firing procedures – employers usually extend the screening of young applicants without any work experience, since the adjustment costs of a potential mismatch are conspicuous (Müller and Gangl, 2003; Scherer, 2005; Kogan and Unt, 2008). Moreover, in tightly regulated labour markets, school-leavers may be more reluctant to accept job offers for underqualified and less-prestigious employment than in deregulated contexts, since the possible scarring effect of a 'bad' labour market entry is more persistent (Gangl, 2003a; Gebel, 2010; Barbieri and Cutuli, 2015).

However, existing taxonomies understate that regulation of the employment relationships does not homogeneously affect all the strata of the labour force. For example, in response to globalisation pressure, many European countries implemented forms of deregulation 'at the margins' that facilitated the volatility of temporary employment, while leaving the protection of standard employment largely unchanged (Barbieri, 2009; Cahuc and Postel-Vinay, 2002). The disproportionate protection in favour of permanent compared to temporary contracts may have important consequences for the occupational progression of the youth labour force that experienced employment flexibility at labour market entry. In fact, when permanents contracts are disproportionally protected compared to fixed-term contracts, these fixed-term contracts are more likely to be bad jobs used to cope with short-term demand fluctuations (Barbieri and Cutuli, 2015; Centeno and Novo, 2012). In this insider–outsider setting, fixed-term contracts at labour market entry could hamper future career

[10] As will be discussed in detail in chapter 4, the low restrictions to early career mobility may result in either accumulation or compensation of the initial social inequalities depending on other country-specific considerations.

upgradings via low human capital-accumulation and bad signalling to future employers.[11]

Finally, the levels of employment protection may also have important implications in terms of life course evolution of social inequalities in occupational attainment. Similarly to product market regulation, strong employment protection reduces the availability of vacancies and the turnover of the workforce (Bertola and Rogerson, 1997; Gangl, 2003b), thus reducing the chances of early career mobility for all social groups. In this view, strong employment protection may concur to the 'life course stability' of social inequalities emerging at the onset of the career.

The last institutional characteristic scarcely oversimplified by previous classifications of institutional regimes is trade unionism, which may indeed play an ambivalent role for the integration of youth into the labour market.

While the VoC approach conveys only a positive view of unions, well-established theories underline how trade unions can indeed represent an important source of labour market segmentation. In particular, insider-outsider theories suggests that unions are likely to protect the core and unionised labour force over the interests of those out of the labour force or in peripheral positions (Lindbeck and Snower, 1998). Considering young labour market entrants, this insider-outsider scenario suggests that those entering the labour market with fixed-term contracts are indeed outsiders compared to those entering the labour market in permanent positions. However, unions are likely to protect the interests of all workers, at least to some extent (Hyman, 2001). Hence, fixed-term entrants may indeed be considered insiders compared to young people who never entered employment.[12]

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[11] However, entering the labour market in a temporary position is often considered better than remaining in unemployment, which offers no opportunity for human capital accumulation and represents the worst signal for future employers (Gebel, 2013; Steijn *et al*., 2006).

[12] Similarly, workers in high-ranked occupations may be more protected by unions compared to workers in low-ranked occupations – irrespective of their contractual position. Therefore, under strong unionism, fixed-term entrants may indeed be considered outsiders compared to their counterparts who entered employment with higher occupational status, and insiders compared to their counterparts who entered employment with lower occupational status.

In this perspective, by protecting the interests of insiders over the interests of outsiders, unions may indeed foster career immobility and play an ambivalent role for fixed-term entrants: strong unions could hinder their opportunities of upgrading to better-off jobs and to permanent contracts – but at the same time – strong unions could also protect them from the risk of occupational downgrading and unemployment.

The implications of strong trade unionism for the evolution of social inequalities in occupational attainment over the early career are rather complex. On the one hand, strong unionism fosters labour market segmentation and workforce immobility, for example, by sustaining strong employment protection and favouring occupational closure in the product and service markets. In doing so, strong unionism concurs in keeping low the overall level of career mobility, thus reducing the chances of youngsters from different social background to take advantage from early career progression.[13] On the other hand, the extent to which unions keep high restrictions to career mobility – for example, by opposing to liberalisation reforms in the market domain and by defending the interest of their core members – are likely to vary greatly cross-nationally and in light of specific historical circumstances. Crucial in this respect is the role of social responsibility of unions in times of economic hardship, and their capacity to tolerate unpopular policy measures aimed at fostering economic growth and employment levels through market flexibilisation.

1.5 Overview of remaining chapters

The remaining of the thesis consists of three empirical chapters. Starting from the general theoretical considerations discussed so far, each chapter touches upon a specific aspect of the school-to-work transition by considering – from time to time – the role of a slightly different set of institutional characteristics. Therefore, specific theoretical considerations, hypotheses, data issues and methods will be discussed in each chapter.

[13] As already stressed in footnote 10 (pp. 22), lower restrictions to career progression may result in life course accumulation or compensation of social inequalities emerging at labour market entry depend on country-specific considerations.

The thesis combines the two main approaches to comparative research on the school-to-work transition described earlier (see par. 1.2.2). Chapters 2 and 3 use cross-national datasets and attempt to model empirically the influence of the institutional context. Conversely, chapter 4 uses national datasets and compares only two countries, Italy and the Netherlands, chosen for their potential in magnifying the importance of several institutional characteristics. An overview of the design and the main findings of each empirical chapter is provided below.

Chapter 2 focuses on the transition from education to the first significant employment of young Europeans. Here, the speed of entry into the first employment and the quality of the first employment (in terms of prestige) are compared among school-leavers from 17 European countries over the period 1995-2009. In addition to some classical institutional characteristics considered by previous literature – such as the employment protection legislation and the vocational orientation of the education system – I also theoretically consider and empirically evaluate the role played by regulations in the service and product market domains. In doing so, the chapter answers old questions about the importance of labour and educational institutions, and puts forward new theoretical arguments regarding the importance of product market regulation.

It is hypothesized that while some institutional features positively affect both of the two 'transition outcomes' of first labour market entrants (speed of entry and prestige), others display opposite effects, reducing the fluidity of labour market access but assuring better placement in the occupational hierarchy. In line with the ILM/OLM distinction, we expect the vocational orientation of the educational and training system to work as an institutional characteristic that facilitates job matching by certifying applicants' competencies and easing labour screening – which should therefore speed up labour market entry and enhance the prestige of the first job. On the other hand – due to their negative influence on the number of vacancies and turnover levels and their positive influence on the occupational structure in the long term – we expect employment protection legislation and product market regulation to be at the very basis of a macro-level trade-off between speed of entry and average prestige.

Combining micro-level data from the EU-LFS 2009 *ad hoc* module on the school-to-work transition and macro-level data from international sources, the chapter shows that part of the contextual variations in the occupational outcomes of young school-leavers are explained by institutional diversity. In line with the hypotheses, the higher in a context the levels of employment protection and product market regulations are, the slower the transitions into first employment and the better the average prestige of the job entered are. The vocational orientation of educational systems alone seems to enhance both the speed and the quality of the first job entry.

Chapter 3 focuses on the institutional determinants of the occupational progression after the first job entry in the European context. Here, the focus is on the chance of contractual and occupational mobility of youngsters entered the first employment with a fixed-term position in the period 1995-2009. A well-established stream of research argued that fixed-term employment at the beginning of the career undermines subsequent occupational progression via low skill-accumulation and bad signalling to future employers. However, previous studies usually claim that the extent to which this scenario applies depend on the institutional context. The chapter tests this specific contention by examining the occupational progression after a fixed-term entry in a variety of institutional settings.

It is hypothesised that the occupational developments after a fixed-term entry strongly depend on the actual level of institutionally driven segmentation into the labour markets. In particular, the role of two interconnected dimensions of institutionally driven segmentation is considered: the gap in the protection of standard and temporary contracts, and the degree of unionisation. Both institutional dimensions are argued to increase barriers across labour market segments (by protecting insiders and lowering the quality of fixed-term employment), thus reducing the chances of contractual and occupational mobility after a flexible entry.

Using EU-LFS data and macro-level data from international sources, the analyses shows that the career development after a flexible entry is indeed influenced by the two institutional dimensions considered. On the one hand, a strong disproportion in the protection of permanent compared to temporary contracts is associated with a higher

probability of remaining in a fixed-term position in the early career, whereas it has no influence on the probability of occupational mobility. On the other hand, strong unionisation has no influence on the chances of contractual mobility after a fixed-term entry, while decreases the chances of moving both upward or downward on the occupational ladder. Finally, there is some evidence that a shift to a permanent contract is more often connected with upward occupational mobility in strongly rather than weakly unionised labour markets.

Chapter 4 examines again the process of entry into the first employment and early career progression, but with a specific focus on the direct influence of social origin on men's occupational attainment. Here, the focus is on the influence of institutions on the extent of early career mobility and its role for the evolution of social inequalities emerging at the onset of the career. Two countries are compared along the last half of the 20th century: Italy and the Netherlands. These two countries currently belong to the country clusters showing the highest and the lowest level of youth unemployment: the southern European and the continental clusters, respectively (see Figure 1.2, par. 1.1). However, the institutional contexts of the two countries were more similar in the past than in recent years. Until the 1980s, both countries were characterised by strict regulations in the labour and product market domains, which contributed to keep low the extent of career mobility. However, their institutional settings started to diverge considerably in response to the crisis of the fordist model in the early 80's.

It is hypothesised that, in Italy, high market rigidities and the strong opposition of unions to liberalisation practises kept low the extent of occupational mobility for the whole second half of the 20th century, thus leaving no room for either accumulation or compensation of initial inequalities. Conversely, until the mid-70's, institutional restrictions to career mobility and the relatively high occupational boundaries in the Netherlands were counterbalanced by an economic structure based on large firms offering strong internal career ladders. Moreover, in the Dutch context, a process of market liberalization in response to the fordist crises found weak opposition from unions, and further increased the extent of career mobility after the 80's. Here, it is hypothesised that the lower restrictions to career mobility have revolved in more

chances of life course accumulation (rather than compensation) of initial social inequalities.

Using life-history data from the *Italian Longitudinal Household Panel Study* and the *Family Survey Dutch Population,* this chapter shows that the direct effect of social origin on occupational attainment is extremely stable over the early life course. Offspring hailing from advantaged social background enjoys a better occupational position at labour market entry, while experiencing similar rates of career progression compared to their counterparts from less-advantaged families. This pattern of intragenerational stability is found irrespective of institutional and structural restrictions to career mobility characterising the two countries and the different periods analysed. However, when entering the labour market in the same occupational position, offspring from higher social background enjoy higher rates of progression compared to their counterparts from less-advantaged families in both Italy and the Netherlands.

CHAPTER 2

INSTITUTIONS AND THE SCHOOL-TO-WORK TRANSITION: DISENTANGLING THE ROLE OF THE MACRO-INSTITUTIONAL CONTEXT

Brief summary

This chapter explores cross-national variations in young school-leavers' labour market entry process across 17 European countries from 1995 to 2009. The general aim is to disentangle the role of the macro contexts by analysing the influence of a series of institutional factors on the speed of the school-to-work transition and the prestige of the first relevant job. The influence of the vocational orientation of the educational systems, the employment protection legislation and the product market regulation are theoretically considered and empirically evaluated. Relying on micro-data from the 2009 Ad Hoc module of the European Labour Force Survey, the role of long-term institutional settings and the influence of short-term institutional changes are disentangled. Moreover, I test for a possible institutional macro-level trade-off between speed and quality of the school-to-work transition. Finally, evidence of significant interactions between the employment protection and vocational orientation of the educational system and between product and labour market regulation is found.

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2.1 Introduction

The transition from education to the first employment is a key step towards adulthood in all western countries. As argued in the first chapter (par. 1.1), plenty of economic and sociological literature showed that poor start in the labour market can negatively influence later occupational prospects, while early work life stages are good predictors of later life course developments.

This chapter analyses the institutional determinants of the speed of entry and the overall quality (measured as prestige score) of school-leavers' first significant job in 17 European countries between 1995 and 2009. Our approach aims to disentangle the specific role of several institutional characteristics and some possible interactions among them from both a theoretical and an empirical standpoint. We consider the role of the vocational orientation of the education and training systems (VET), the employment protection legislation (EPL), and the product market regulation (PMR) by exploiting institutional variety occurring both across space and along time. In doing so, we propose an alternative to strategy of inferring the influence of institutional factors by comparing the outcomes of the school-to-work transition in a small set of countries characterised by different institutional arrangements considered only at the theoretical level (e.g. Brzinsky-Fay, 2007; Scherer, 2005; Shavit and Müller, 1998).

In the last two decades, the increasing availability of comparative measures of institutional factors has been reflected in the increase in the number of studies making use of macro-level indicators in the school-to-work transition literature (e.g. Breen, 2005; van der Velden and Wolbers, 2003; Wolbers, 2007b). Inspired by the taxonomies discussed in the first chapter, this stream of research has typically focused on the role of employment protection and the vocational orientation of the educational system and generally found that school-to-work transitions are smoother in both highly deregulated labour markets and highly vocationally oriented systems. However, these studies have been mainly cross-sectional and/or assumed within-country institutional stability over time. The attempt to 'longitudinalise' the analysis of the macro context is a relatively recent effort in the school-to-work transition literature. A recent study by de Lange and

colleagues (2014) has exploited both sources of institutional variation (between and within countries), thus providing a better understanding of the functioning of the macro context by simultaneously estimating the role of distinct institutional characteristics.

While building on the main contributions of the existing studies, I delve further by attempting to open the black box of the macro-institutional context in four important ways.

First, I provide a conceptual distinction and a tentative empirical identification of the influence of long-lasting institutional settings and short-term institutional changes – given by the country average of an institutional characteristic over time and the country-level yearly deviation from this average, respectively.

Second – in addition to employment protection and vocational orientation – I enrich the set of institutional determinants of the school-to-work transition by analysing a feature not yet considered in the literature: the strictness of product and service market regulation, which mirrors the amount of restrictions with regard to the supply of goods and services in terms of barriers at entry, prices, and fees. It is argued that state regulations, corporatist barriers at entry, and bureaucratic controls over investments and entrepreneurship influence youth labour market prospects by reducing job growth and job turnover while shifting the occupational structure upwards. Moreover, in the economic literature, the effects of labour market institutions are often considered second-order effects that cannot be evaluated without taking into account product market institutions (Bassanini and Ernst, 2002; Bertola, 2014). Therefore, by jointly considering regulations in the labour- and product market domains, I explore the net effects of these regulative dimensions in shaping the trajectories of young school-leavers entering the European labour markets.

Third, I theoretically frame and explicitly model the interactions between *a)* EPL and the strength of VET systems and *b)* EPL and PMR by using micro-level data. To the best of my knowledge, the socio-economic literature only considers these interactions at the theoretical level or tests them using exclusively macro-level data (e.g. Breen, 2005; Fiori *et al*., 2012; Scherer, 2005).

Last, I make use of the time dimension to control for national idiosyncrasies possibly leading to biased conclusions, as has been advised by recent sociological literature (e.g. te Grotenhuis *et al*., 2015).

The analyses suggest that the average occupational prestige at labour market entry is associated with the overall long-term contextual setting related to each of the three institutional characteristics (VET, EPL, and PMR), whereas the speed of entry seems to be related to both the long-term institutional settings and the short-term institutional changes. In particular, a strong VET system facilitates the speed of transition and provides a better placement in the occupational hierarchy in terms of prestige. On the other hand, regulations in the labour- and product market spheres labour and product market regulations lie at the foundation of a macro-level trade-off between speed of entry and the prestige obtained in the first significant job: the higher in a context the levels of EPL and PMR are, the slower the transitions into employment and the better the average prestige of the job entered are. Finally, looking at the speed of entry, we find evidence both of decreasing effects of EPL in strong vocationally oriented educational systems and of increasing effects of PMR in contexts with strong labour market rigidity.

2.2 Institutions, market forces, and young people's entry into the labour market: Theoretical framework and hypotheses

As stressed in the first chapter of this thesis (see par. 1.2.2), individuals do not act in a vacuum. Institutional arrangements set boundaries on individuals' economic actions, thereby influencing employers' and school-leavers' decision-making processes. Alongside institutions, market forces also strongly influence the matching of school-leavers to jobs by shaping the productive and occupational structures in general and the opportunities for new entrants in particular.

The economic literature suggests that the general process of occupational upgrading raised by technical change largely affects the marginal distribution of occupations within national contexts (Acemoglu, 2002; Bauer and Bender 2004; Caroli and van

Reenen, 2001). I argue that – in addition to market forces – the marginal distribution of occupations is also sensitive to institutional arrangements. More precisely, the process of occupational upgrading (and therefore the average prestige of the entry job) is only affected by extended exposure to institutional settings, whereas the fluency of the transition into employment (speed of entry) is sensitive to both short-term, specific institutional changes as well as to long-term settings – as shown by the sociological literature (Maurice *et al*., 1986; Shavit and Müller, 1998).[15]

It is argued that while some institutional features positively affect both transition outcomes (speed of entry and occupational prestige) of labour market entrants, others display opposite effects, reducing the fluidity of labour market access but assuring better placement in the social stratification hierarchy. Indeed, I expect a strong VET system to work as an institutional characteristic that facilitates job matching by making applicants' qualifications more reliable and easing labour screening – which should speed up labour market entry and, in the long term, shift the average prestige of the first jobs upwards.

On the other hand, I expect the two regulatory arrangements (EPL and PMR) to be at the basis of a macro-level trade-off between speed of entry and occupational prestige. The higher the levels of both labour and product market rigidity, the lower the chances to rapidly enter into employment and, in the long term, the better the average occupational prestige at labour market entry.

Given these general expectations, in the following section, I provide a discussion of the role of the vocational orientation of the educational system as well as of the roles of

[15] As will become clearer in the following pages, the between-country differences in the national averages in VET, EPL, and PMR are interpreted as the correlates of the unobserved long-term institutional consonance. In other words, I conceptualise the between-country differences as the results of long-lasting congruence among contextual factors. Conversely, the within-country differences, i.e. the yearly deviations from each of the country averages, are conceptualised 'by construction' as short-term and independent institutional changes.

labour and product market regulation in shaping the outcomes of young people's entry into first employment.[16]

2.2.1 The role of VET system

The vocational orientation of the education and training systems – i.e. the extent to which they provide specific and easily identifiable occupational skills – is an important institutional characteristic that shapes the pattern of transition into the labour market (e.g. Allmendinger, 1989; Scherer, 2005; Shavit and Müller, 1998). I contend that strong VET will favour faster first labour market entries (*Hypothesis 1*). Indeed, in strong VET systems, school-leavers are already qualified and partly trained to perform specific occupations. Employers can thus easily anticipate their expected productivity and training costs simply by looking at their curricula. As a result, assignments can be completed rapidly since trial/training periods and future adjustments are less likely to occur (Blossfeld, 1992; Kogan and Unt, 2008; Scherer, 2005).

Given that vocational education in most countries takes place in upper secondary schools, these mechanisms should work mainly for school-leavers with secondary (and possibly vocational) qualifications. However, we argue that school-leavers with more general and academic education could also enter the labour market quickly in a strong VET system. First, educational systems with strong vocational tracks in secondary education generally also offer vocationally oriented tracks in tertiary education (e.g. the German system). Second, vocational education is indeed a means of diversification, and

[16] Looking at the country-level association of youth unemployment and the low speed of transition might suggest that the results of the role of institutional settings can be transferred from the former to the latter. However, similar institutional settings and consistent patterns of institutional reforms have been accompanied by heterogeneous trends of speed of entry and youth unemployment within single countries over time. This finding cautions against assuming homogeneous effects of institutional factors (such as labour market institutions) as co-determinants of both average speed of entry and youth unemployment rates. For instance, relaxing employment protection can be expected to shorten transitions (in line with one of the hypothesis proposed in this chapter) and unemployment spells without affecting overall youth unemployment rates (Noelke, 2015).

the enrolment of students in secondary vocational programmes should reduce competition among school-leavers with academic backgrounds, thus making their qualifications more relevant to employers.

I also expect that strong VET systems will lead to better-off job positions in terms of prestige upon labour market entry (*Hypothesis 2*). A vast amount of literature suggests that vocational education in secondary schools provides a 'safety net' for less-capable and less-academically oriented students by preparing them for well-established and recognized working-class occupations (Arum and Shavit, 1995; Müller and Shavit, 2000). Instead, tertiary graduates should enter free professions and service-class occupations – i.e. highly prestigious jobs – in all contexts, irrespective of the existence of a strong VET system. Similarly, people with only primary or no education at all should enter the least-prestigious job positions requiring the least qualification, irrespective of the strength of VET systems. Therefore, once the composition of school-leavers in terms of education is controlled for, I expect that, in the long term, a strong VET system will be associated with higher average prestige in the first jobs and that this relation will be mainly driven by the availability of qualified job positions for school-leavers with secondary education. An additional reason to expect a positive influence of a strong VET system on the occupational prestige of the first employment is evident in the capacity of vocational education to prevent over-skilling during the initial stages of an individual's career.

2.2.2 The role of EPL

The setting of normative constraints that govern hiring and firing processes has been shown to be a relevant institutional characteristic in shaping the labour market entry process of young school-leavers (e.g. Breen, 2005; Wolbers, 2007b). The main mechanisms accounting for the detrimental influence of EPL on the speed of entry refer to the negative effects on the availability of vacancies (Bertola and Rogerson, 1997), on the turnover of the workforce (Gangl, 2003b), and on firms' adjustment to economic fluctuations (Boeri and van Ours, 2013; OECD, 2005).

We argue that the norms governing temporary employment (rather than those protecting permanent contracts) are particularly relevant in influencing the school-to-work transition. Given the institutionalised dualism of the European labour markets (Barbieri, 2009; Barbieri, Cutuli, 2015; Esping-Andersen and Regini, 2000; Palier and Thelen, 2010) and the fact that the lion's share of labour market entrants end up in temporary employment, we expect the strictness of legislation that governs eligibility criteria, cumulative duration, and reiteration of temporary contracts to be positively related to the length of school-leavers' job searches as well as to the occupational prestige of their first significant job.

Due to the strict regulations of the hiring procedures, employers extend the screening of applicants since the adjustment costs of a potential mismatch are conspicuous. This holds especially true for school-leavers, who generally imply additional training costs for employers (Kogan and Unt, 2008; Müller and Gangl, 2003b; Scherer, 2005). On the contrary, potential job mismatches are less pricy when EPL is low, and employers can thus take faster hiring decisions. Therefore, in line previous literature, I expect school-leavers in context of strong EPL to enter a first employment slower compared to school-leavers in context where the EPL is stricter (*Hypothesis 3*). However, institutions do not act in isolation, but rather in interaction with other institutional spheres (Hall and Soskice, 2001), especially when they influence individuals by means of similar mechanisms. This is true when analysing the influence of the employment protection and the vocational orientation on the speed of the school-to-work transition. In fact, both strict EPL and weak VET systems raise the potential costs of replacing an employee once hired. As Breen (2005) and Scherer (2005) have pointed out, the higher costs of hiring procedures typical of high EPL labour markets are far less problematic for employers when a strong VET system reduces the probability of a potential mismatch. In this scenario, fast hiring decisions can even occur in the presence of strict employment regulation. Hence, we expect strict EPL to decrease the speed of entry especially contexts of weak VET, but less so in contexts where the education system is strongly vocationally oriented (*Hypothesis 3a*).

The long-term EPL setting is also likely to influence the quality of school-leavers' first significant job by modifying their opportunity costs and the occupational structure to which they are exposed. First, in tightly regulated markets, school-leavers may be more reluctant to accept job offers for underqualified and less-prestigious employment than in de-regulated contexts since the possible scarring effect of a 'bad' labour market entry is more persistent (Barbieri and Cutuli, 2015; Gangl, 2003b; Gebel, 2010; Scherer, 2004). Moreover, it has been shown that a strict regulation of the labour market concurs to shifts the occupational structure upwards in the long run, consistently with the negative association between the strictness of EPL and the share of low-quality jobs in Western countries (Kalleberg, 2011; Nellas and Olivieri, 2012; Streeck, 1992). For these reasons, we expect school-leavers to enter the labour market in more prestigious positions in countries traditionally characterised by high levels of employment protection (*Hypothesis 4*).

2.2.3 The role of PMR

PMR refers to formal restrictions on the supply of goods and services within economies. More precisely, these restrictions entail both state regulations and corporatist barriers upon entry as well as bureaucratic controls over investments, entrepreneurship, prices, and fees (OECD, 2014b). While product market regulation is necessary in modern economies, excessive regulation comes at a cost: Entrepreneurs may be discouraged, monopolies may be rewarded, firms' innovation and productivity may be hampered, and economic growth may therefore be limited (Nicoletti and Scarpetta 2005; Parker and Kirkpatrick, 2012). I argue that these dynamics are particularly relevant for young job-seekers. In fact, strong PMR discourages new start-ups and impedes innovation processes in incumbent firms, two of the keys to youth entrepreneurship and job-creation for young people. Moreover, more competitive product markets boost economic growth, which favours young people's integration into the labour market (O'Higgins, 2010; OECD, 2009).

As suggested for the EPL, strong PMR dampens the aggregate labour demand and decreases the vacancies available in the external labour market (Amable *et al*., 2011; Amable and Gatti, 2004; Nickell, 1999). This, in turn, reduces workers' exit options, thereby increasing job stability (Amable and Gatti, 2004). A reduction of vacancies and low job turnover stifle the chances of all job-seekers to rapidly (re-)enter the labour market. These dynamics could especially impact the speed of entry for young school-leavers to the extent that they are outsiders compared with more-experienced job-seekers (De Vreyer *et al*., 2000; Wolbers, 2007b). Based on these arguments, I expect that in contexts with a strong PMR school-leavers will take more time to enter a first employment compared to school-leavers in context whet PMR is weaker (*Hypothesis 5*)

However, it is also important to consider the role of PMR in combination with other institutional factors. The socio-economic literature stresses the potential interaction between EPL and PMR in influencing the overall employment rate (Fiori *et al*., 2012). I extend this argument to the speed of transition into the first job. In particular, it is argued that the benefits of deregulating the product market will be higher when other labour market rigidities concur to slow the labour market entry process. In fact, when transitions into first employment are slow due to strict labour market regulation, there is great room for the beneficial effects of relaxing product market legislation (*Hypothesis 5a*).

Moreover, while decreasing the speed of the transitions into first employment, I expect high levels of PMR in the long run to be positively associated with the prestige of the first job (*Hypothesis 6*). Similar to what has been argued for the EPL, the long-term PMR setting shapes both the opportunity costs for school-leavers and the occupational structure to which they are exposed when seeking employment. Indeed, the detrimental effects of the strictness of PMR on job mobility may disincentivise young people from accepting jobs whose prestige is below their expectations, due to the low chances of occupational mobility afterwards. More importantly, tight product and service market legislations are associated with a lower expansion of low-quality jobs in the long run, especially in the service sector and for women (Krugman, 1994; Pissarides, 2005). Therefore, in the long run, strict PMR should increase the expected

prestige upon labour market entry by preventing downward shifts in the occupational structure and by increasing the selectivity of the job-search.

2.3 Data, variables, and methods

2.3.1 Data

I use data from the Eurostat 2009 Labour Force Survey's *ad hoc* module 'Entry of young people into the labour market'.[17] This module was specifically designed to collect comparative retrospective information on the school-to-work transition of respondents aged 15-34 in 31 European countries. More precisely, the dataset includes information on the transition from the last exit from formal education (defined as every educational experience included in the joint UNESCO, EUROSTAT, OECD questionnaire – UEO) into the first significant job (defined as the first non-casual paid job lasting at least three months).[18]

The analyses are based only on the 17 European countries for which reliable micro-data and comparable macro-indicators are available. Switzerland and Germany are excluded from the analysis due to serious concerns about the definition of the first significant job and data comparability (see Eurostat (2012) for Switzerland and Wingerter (2011) for Germany). However, it can be argued that the exclusion of these two 'apprenticeship' countries leads to a conservative estimation of the influence of vocational orientation of the education system since these two countries traditionally show comparatively fast and prestigious entries into the labour market.

Due to lack of comparable macro-data, I also restrict the analyses to respondents whose last exit from formal education was verified after 1995 (the latest exit was in 2009). After this adjustment and list-wise deletion of missing values, a maximum

[17] Other kinds of longitudinal cross-national data, such as EU-SILC, only cover a limited time span and are less suited to explore the role of institutions making use of longitudinal variations occurring within countries over time.

[18] Apprenticeship, unpaid traineeship, summer jobs, and compulsory military or community service are not considered first significant employment spells.

analytical sample of 105,237 cases remains. Details regarding sample sizes in each country and year can be found in the Appendix (Table A1).

2.3.2 Variables

The first dependent variable is the speed of entry into the first significant job, which is given by the transition rate of entering the labour market after leaving formal education, i.e. the propensity of finding a job by a certain date assuming that this has not occurred before that time (monthly time-spells data).[19]

The second dependent variable is the prestige of the first significant job, measured by the Standard International Occupational Prestige Scale (SIOPS) elaborated by Treiman (1977) and updated and validated by Ganzeboom and Treiman (1996) on the basis of the ISCO–88 classification (International Standard Classification of Occupation). The index is computed by averaging the subjective evaluation of the prestige associated with occupational categories for large samples of population in 60 countries. The scale scores from a minimum of 12 to a maximum of 80 and is related to the 'general desirability of occupations' as defined by Goldthorpe and Hope (1974). SIOPS represents a standard tool in comparative analyses, and is particularly suited to our context since occupational prestige rankings has been shown to be remarkably stable over countries and periods (Hout and DiPrete, 2006).

The three main independent variables are the EPL, PMR, and VET indicators, measured at the country-year level. The EPL strictness is measured through the 2013 OECD index 'regulation of temporary employment'.[20]

To compute PMR, we use the sub-index 'Business Regulation' of the overall 'Economic Freedom of the World' index as computed by the Fraser Institute (Gwartney

[19] Jobs begun before the last exit from education are treated as if they had begun immediately after leaving education. Respondents who never found a significant first job are treated as right-censored.

[20] However, main results are confirmed using an 'overall index' computed as the mean of the regulation with regard to 'temporary employment' and 'regular employment'.

et al., 2013). This sub-index summarises information for a large set of countries from 1985 onwards[21] with respect to six indicators: *i)* administrative requirements, *ii)* bureaucracy costs, *iii)* difficulties in starting a business, *iv)* extra payments / bribes / favouritism, *v)* licensing restrictions, and *vi)* cost of tax compliance.[22]

The VET index is computed as the percentage of students enrolled in vocational programmes in secondary education, irrespective of whether or not these programmes combine school- and work-based training (UNESCO data).[23] Unfortunately, it was not feasible to empirically distinguish between types of VET (e.g. Busemeyer and Trampusch, 2012) with a time-varying indicator. Indeed, more detailed measures – such as the OECD indicator accounting for the percentage of upper secondary students enrolled in programmes that combine school- and work-based training – are not available for many country-year combinations.[24]

EPL, PMR, and VET indices are normalized to vary between 0 – the theoretical minimum – and 1 – the theoretical maximum and matched to individual-level data according to respondents' country and year of exit from the educational system (prestige) and according to respondents' country and year of each monthly spell (speed

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[21] The sub-index is calculated for each country in a 5-year period from 1990 to 2000 and on a yearly basis from 2000 onwards.

[22] Data are freely available here: http://www.freetheworld.com. All these indicators are taken from various reports of internationally recognized organizations, such as the World Bank and the World Economic Forum. See Gwartney and colleagues [2013, pp. 246–248] for a detailed description of all indicators and data sources.

[23] We focus on secondary education since the vast majority of vocational training in all countries takes place at this educational level. Moreover, it should be noted that our index of vocational orientation provides a conservative test for our hypotheses. Indeed, this broader measure also includes programmes that solely offer school-based training and in which the specificity of skills is generally lower compared with programmes that combine school- and work-based training.

[24] Alternative strategies to consider empirically differences in VET systems, such as including a categorical variable that groups countries irrespective of variations occurring over time or using a time-fixed indicator, would be in stark contrast to our aim of analysing the role of the institutional contexts by distinguishing between the influence of long-term institutional arrangements and the effects of short-term institutional changes.

of entry). Higher values of the macro indicators entail stricter EPL, stricter PMR, and stronger VET systems.[25]

A set of individual-level covariates controls for the influence of several personal characteristics on the two outcomes of interest, i.e. sex (dummy); parental education (high, medium, low); respondent's level of education (primary and lower secondary, upper secondary general, upper secondary vocational, tertiary); and compulsory military service after having left school (dummy). Moreover, some model specifications include countries' and school-leavers' cohort dummies (1995/2000; 2001/2005; 2006/2009).

2.3.3 Methods

The main contention here is that the overall contextual variation in the outcome of interests can be depicted as variation across national contexts and time. As stated previously, the aim is to disentangle this overall contextual variation by looking at the role of several institutional characteristics in shaping young school-leavers' labour market entry.

The duration of the transition from education to the first significant job is analysed by means of continuous-time transition-rate models run on a person-month dataset. This strategy jointly allows for *a)* including time-varying covariates at the contextual-level and *b)* taking into account right-censored respondents who did not experience the failure event during the observation window (i.e. entering a first job). I use piecewise constant exponential models, thereby splitting the time axis in *J*-intervals in order to approximate the shape of the baseline hazard over time. More formally, the models have the following general form:

[25] The total unemployment rate and GDP per capita (divided by 5,000, in current USD) – as proposed by the World Bank – are used to control for economic fluctuations in each country and year of exit from education (prestige) or in each country and year of the monthly-spells (speed of entry). Tables with institutional variations over time and correlations among macro-variables can be found in the Appendix (Tables A2 and A3).

$$r(t) = \exp(\alpha_j + \beta X + \delta M) \qquad for \quad t \in [\tau_j, \tau_{j+1}] \quad and \quad j = 1,...,J \tag{1}$$

where α_j is the specific constant estimated for each time interval τ_j; X and M are row vectors of individual (time-constant) and macro-level (time-varying) covariates, respectively; and β and δ are column vectors of associated parameters assumed not to vary across time intervals. In this setting, the role of institutions is investigated in a dynamic perspective since macro indicators (M) are allowed to vary on a yearly basis through the time-process (within countries and within individuals) until the failure event occurs (in this case, entering a job).

The prestige of the first significant job is analysed by means of linear multilevel models where only the intercept is allowed to vary randomly. This strategy allows for taking the nested structure of the data into account and for estimating the proportion of the total variance of the outcome that is attributable to the individual and the contextual level. A two-level structure is adopted whereby individuals (i) are nested in 255 combinations of country and school-leavers' cohort (j). More formally, I use several specifications of the following general model:

$$y_{ij} = \beta X_{ij} + \delta M_j + (U_j + \varepsilon_{ij}) \qquad for \quad j = 1,...,J \tag{2}$$

where the fixed part of the equation includes a vector of characteristics of the individual *i (X)*, a vector of macro-level characteristics of the country-cohort combination *j (M)*, and their relative vectors of parameters β and δ. In the random part of the equation (in brackets), the error term U_j exclusively includes the random intercept, whereas ε_{ij} represents the residual variation at the individual level. In this setting, all macro indicators (M) vary at the higher level of analysis, thus assuming a different value for each of the 255 country-cohort combinations.

It is worth noting how some model specifications rely exclusively on institutional variations within countries over time, thus controlling for time-constant unobserved

heterogeneity at the macro level.[26] We do this both *a)* by applying country fixed effects while including our three macro-level indicators (for the speed of entry, see Model 3 in Table 2.1) and *b)* by discriminating the between-country components of macro-level variations – the specific country averages of each macro indicator for the 1995-2009 period – from the within-country components – the annual deviations from the specific country averages (for both outcomes, see Model 4 in Table 2.1 and 2.3) – as indicated in Allison (2009) and Bell and Jones (2015).

The distinction of the between- and within-components of contextual variations allows us to provide separate interpretations of the influence of the long-term institutional settings and the effect of short-term institutional changes. The between-components are computed as country averages for the whole period, and their estimates rely exclusively on differences among countries. Therefore, they capture the influence of the overall and unobserved contextual arrangement correlated with each of the macro variables of interest in the long run, net of the other macro-level covariates included in the models. This is how I define the influence of the 'long-term' settings associated with each institutional variable.

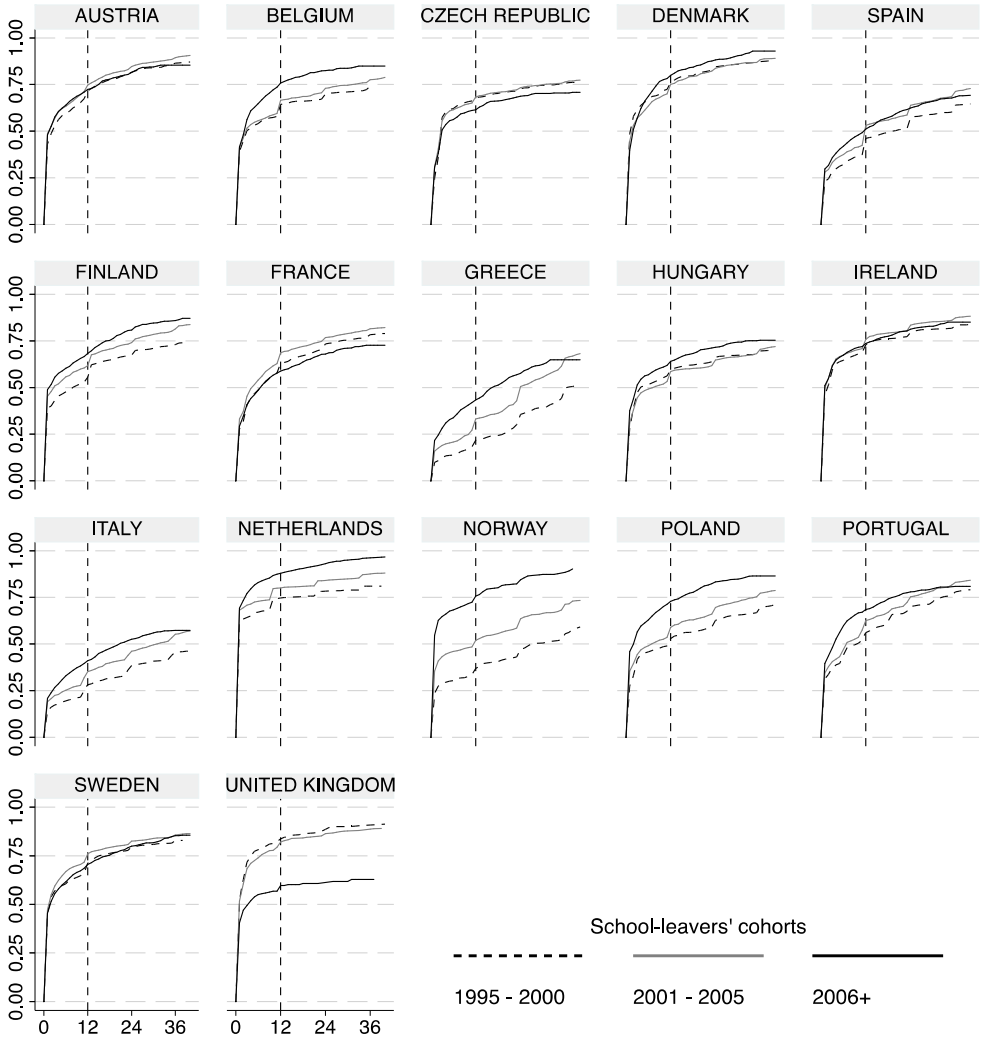
Estimates of the within-components rely exclusively on annual deviations from the relative country averages and suggest the effects of country-specific institutional variations (reforms) cleaned up by time-constant unobserved macro confounders. This is how I define the effect of 'short-term' institutional change.

2.4 Empirical Results

2.4.1 Entering first job

[26] When commenting on the results of models relying exclusively on institutional variation occurring within countries over time (fixed-effects models [without interaction terms] and models including the between- and within-components), the terms 'effect' and 'impact' do not entail a causal underpinning since the presence of time-varying unobserved heterogeneity at the country level cannot be completely excluded.

Figure 2.1 shows the Kaplan-Meier failure functions for entering the first significant job, estimated per each country and school-leavers' cohort. These functions are easily interpretable, as they display the cumulative shares (Y-axis) of school-leavers enrolled in a first significant job at each point in time-process (X-axis, months). A vertical dashed line is added at *t=12* (one year after the last exit from education) to allow for a better interpretation of the results. In line with the differences in unemployment rates among country-clusters shown in the first chapter of this thesis (see



Source: Own elaboration based on the EU-LFS 2009 ad hoc module 'Entry of young people into the labour market'

Figure 2.1 – Kaplan-Meier failure functions: entry into the first significant job by country and school-leavers' cohort

Figure 1.2), the figure shows a remarkable overall contextual variation in the speed of entry into the first employment. In the Netherlands, Ireland, Denmark, Austria, and the United Kingdom, around two-thirds of the school-leavers from all exit cohorts find a first significant job within one year of having left education (with the exception of the latest cohort in the UK). However, in Spain and Italy, the proportion of school-leavers who succeed in finding a significant job within one year varies from between 25% and 50%, whereas in Greece, this share is even lower than the 25% for the earliest cohort. The other national contexts occupy an intermediate position between these two extremes.

Figure 2.1 also shows significant cross-cohort variations within some countries. Generally, school-leavers who left the educational system after 2006 found a first significant job faster than earlier cohorts. This is the case in all Southern European countries, the Netherlands, Norway, Poland, Portugal, Belgium, and Finland. In the remaining countries, there are fewer cohort differences in the time school-leavers need to enter first employment.

The determinants of contextual variations in the speed of labour market entry are analysed by means of transition-rate models. Table 2.1 displays hazard ratios of entering a first job and their significance levels for a set of covariates from four different model specifications.[27]

Model 1 includes dummies for countries and school-leavers' cohorts as well as relevant individual-level characteristics likely to affect the speed of entry into the first job. The rationale behind this model specification is quite simple: If institutions shape the transition patterns, then differences among countries and cohorts of exit (that subsume institutional variety) should remain significant once individual characteristics that influence school-leavers' labour market entry are controlled for. The estimates confirm this scenario since clear cross-national and cross-cohort variations are found net

[27] These estimates represent the ratio of the relative propensities for entering a significant job within a given month (assuming that entrance has not taken place before) between the categories of the independent variables and their reference categories. Where cardinal covariates are concerned, the ratios refer to a unit increase in the independent variable.

Table 2.1 – Piecewise constant exponential models with time-varying covariates for the analysis of the speed of transition into the first job: hazard ratios

	Model 1	Model 2	Model 3	Model 4
Baseline				
0-3 months	0.15**	0.22**	0.19**	0.64**
4-13 months	0.03**	0.04**	0.03**	0.11**
>13 months	0.01**	0.02**	0.02**	0.06**
Female (ref. Male)	0.85**	0.85**	0.85**	0.85**
Parental education (ref. Primary/lower secondary)				
Upper secondary	1.09**	1.09**	1.09**	1.07**
Tertiary	1.04**	1.08**	1.04**	1.03**
Level of education (ref. Primary/lower secondary)				
Upper secondary general	1.53**	1.53**	1.54**	1.55**
Upper secondary vocational	1.93**	1.79**	1.93**	1.82**
Tertiary	2.29**	2.28**	2.28**	2.29**
Compulsory military service (ref. No)	0.68**	0.71**	0.69**	0.72**
Country (Ref. Austria)				
Belgium	0.69**		0.86**	
Czech Republic	0.56**		0.64**	
Denmark	1.01		0.99	
Spain	0.57**		0.96	
Finland	0.79**		0.90**	
France	0.66**		0.99	
Greece	0.49**		0.83**	
Hungary	0.61**		0.75**	
Ireland	0.90**		0.88**	
Italy	0.39**		0.53**	
the Netherlands	1.17**		1.10**	
Norway	0.66**		0.68**	
Poland	0.68**		1.05	
Portugal	1.01		1.37**	
Sweden	0.86**		0.93**	
the United Kingdom	1.07*		1.05	
School-leavers' cohort (ref. 1995-2000)				
2001-2005	1.17**		1.09**	1.11**
2006+	1.25**		1.10**	1.14**
Macro indicators (time-varying)				
Vocational Orientation		0.99	1.19**	
Employment Protection Legislation		0.53**	0.59**	
Product Market Regulation		0.45**	0.75**	
Macro indicators (time-varying)				
Between components *(95-09 country means)*				
Vocational Orientation				1.29**
Employment Protection Legislation				0.90**
Product Market Regulation				0.03**
Within components *(annual dev. from country means)*				
Vocational Orientation				1.30**
Employment Protection Legislation				0.73**
Product Market Regulation				0.83**
N subjects	105,237	105,237	105,237	105,237
N events	87,558	87,558	87,558	87,558
Time at risk	2,584,060	2,584,060	2,584,060	2,584,060

Significance levels (robust standard errors): ** p<0.01, * p<0.05
Models 2, 3, and 4 control for unemployment rate (15-64) and GDP trends as time-varying covariates

of compositional effects due to individual traits.[28] On the one hand, independent of the period of exit from education, school-leavers from the Netherlands and the United Kingdom experience the fastest transitions into the first job: As implied by the hazard ratios of 1.17 and 1.08, transition rates in these contexts are 17% and 8% higher than in Austria (the reference category), respectively. Other countries with relatively high rates of entry are Denmark, Ireland, Austria, and Portugal. On the other hand, the overall country effect on the speed of transition is negative and relevant for Southern European countries (Greece, Italy, and Spain), where the rate of entry is around 50%-60% lower than in Austria.

With regard to cross-cohort differences, the analyses show that, independent of the national contexts, transitions are faster for those who have left education in recent years: Compared with the 1995/00 school-leavers' cohort, transition rates are 16% and 26% higher for the 2001/05 and the 2006/09 cohorts, respectively.

However, in this model specification, dummies for countries and cohorts represent the overall contextual influence on the rate of transition, thereby capturing not only the influence of institutions, but also all idiosyncratic features of the contexts in which individuals allegedly begin the job search.

In Model 2, country and cohort dummies are replaced by time-varying macro indicators related to the economic conditions and the institutional settings, thereby allowing us to unravel the overall contextual influence on the transition rates and to capture the role of specific institutions when confounders related to economic conditions are netted out. As expected, EPL is negatively associated with the transition rate into first employment. The hazard ratio of .53 implies that a shift from the minimum EPL value observed in the data (0.04 – e.g. the UK and Ireland in 2000) to the maximum observed value (0.79 – e.g. Greece and Italy in 1995) is associated with a 38% decrease in the rate of entry into the first job ($[0.53^{0.79-0.04}-1]*100$).

Together with EPL, PMR is also an important institutional feature in delaying the

[28] The coefficients of the individual-level variables are all significant and in line with previous studies.

transition into first employment. More precisely, higher rigidity in the product market increases the time of entering a first significant job. On average, when the PMR indicator increases from the minimum (0.12, e.g. Finland in 2000) to the maximum observed value (0.60, e.g. Italy in 1995), the hazard rate of entry into a first significant job decreases by approximately 32% ([$0.45^{0.60-0.12}$–1]*100). The lack of importance of VET in Model 2 could indicate the presence of relevant (and unobserved) macro-level confounders. Therefore, to better rule out the confounding role of possible unobservables, we provide more stringent tests controlling for time-constant unobserved heterogeneity at the macro level in Models 3 and 4.

Model 3 adds country-and-school-leavers' cohort fixed effects to the usual set of covariates. Interestingly, in this specification, the coefficients related to countries and school-leavers cohorts' are significantly reduced when compared with Model 1. This confirms how time-varying macro indicators are able to explain part of the overall contextual differences in the speed of transition. Model 3 reconfirms the negative effects of stringent EPL and PMR on the transition rate. From a substantial standpoint, the estimates imply that when moving from the greatest negative to the greatest positive within-country deviation of EPL (0.46–in Italy) and PMR (0.36–in Belgium) observed in the data, the transition rate decreases by 22% and 10%, respectively ([$0.59^{0.46}$–1]*100; [$0.75^{0.36}$–1]*100). Moreover, the fixed effect model shows that – once time-constant unobserved heterogeneity at the macro level is controlled for – the strength of VET system also exerts the expected positive impact on the speed of entry: moving from the greatest negative to the greatest positive within-country deviation (0.35–in Hungary) implies a 6% increase in the transition rate ([$1.19^{0.35}$–1]*100).

Model 4 provides a further reliability check and tests the hypotheses about the role of the short-term variations and long-term exposures to the institutional characteristics by excluding contextual dummies (countries and cohorts) and substituting the overall macro indicators with their between- and within-country components. The estimates of the within-components indicate the net effects of country-specific, short-term institutional changes, whereas estimates of the between-components suggest the influence of the overall long-term contextual setting associated with each institutional

condition. All estimates of the within-components confirm our expectations (and results from Model 3): even when controlling for possible bias due to unexplained differences across countries, the within-country changes of institutional variables do influence the speed of entry into the first job consistent with our hypotheses. Additionally, estimates of the between-components have the same sign and significance compared with estimates of the within-components, which confirms the hypothesised sensitivity of the speed of entry not only to short-term institutional changes but also to long-term institutional arrangements.

Finally, Table 2.2 depicts the relevant results for the EPL by VET and the EPL by PMR interactions added to Model specification 3 in Table 2.1. The table reports coefficients instead of hazard ratios in order to ease the interpretation of the results. For the sake of brevity, I do not thoroughly discuss each single coefficient. The interaction term between EPL and VET is positive. This is consistent with the hypothesis that the detrimental influence of the EPL on the speed of entry is less pronounced in contexts in which strong VET systems decrease the probability of potential skill-job mismatches.

On the contrary, the interaction term between EPL and PMR is negative, as expected, thus confirming that lowering product market regulation is more effective at increasing the fluidity of the entry process in contexts characterised by strict employment protection.

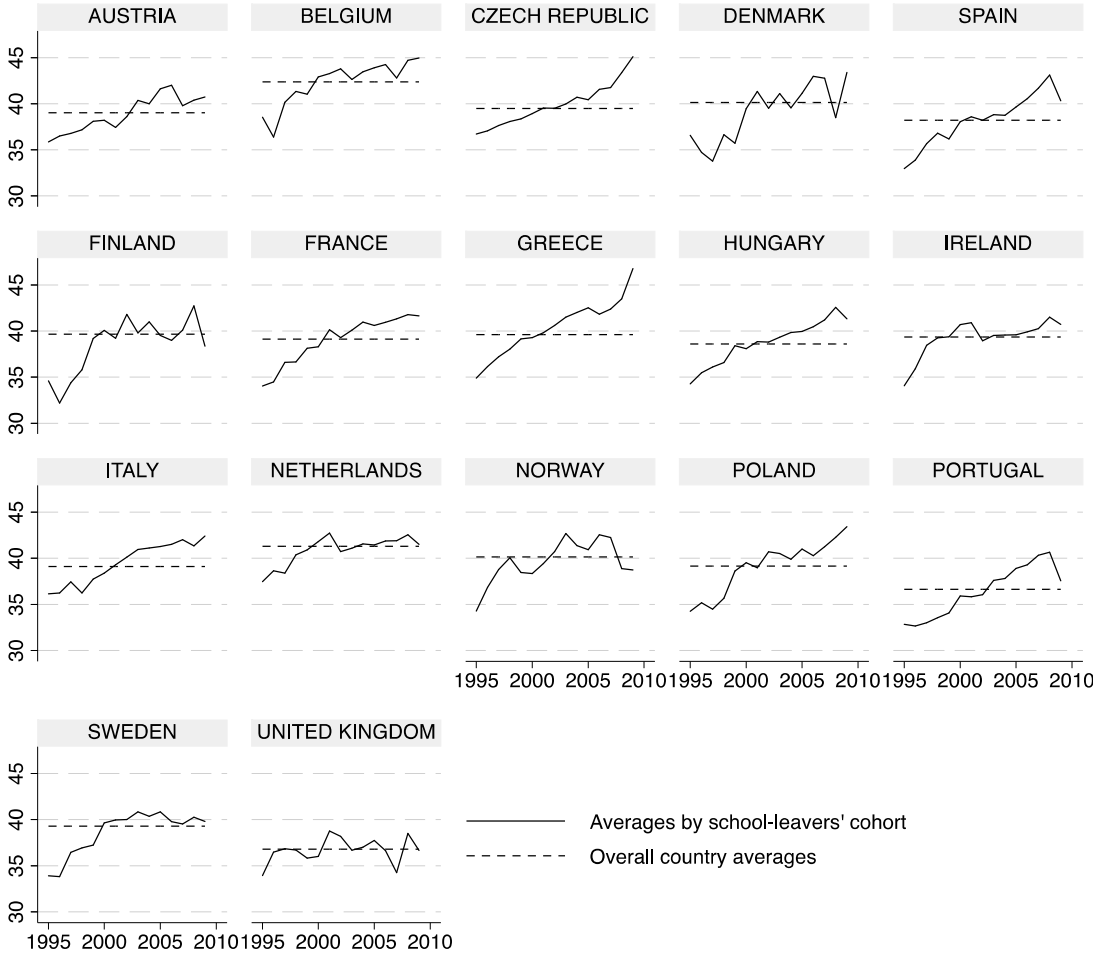
Table 2.2 – Transition to first employment: focus on EPL–VET and EPL–PMR interactions: coefficients

	Model 3 (Table 2.1) + EPL*VET	Model 3 (Table 2.1) + EPL*PMR
Macro indicators (time-varying)		
Vocational orientation (VET)	-0.23*	0.17**
Employment protection legislation (EPL)	-0.93**	-0.07
Product market regulation (PMR)	-0.26**	0.02
Interactions		
EPL*VET	1.33**	
EPL*PMR		-0.96**

Significance levels (robust standard errors): ** p<0.01, * p<0.05

2.4.2 Prestige of the first job

Figure 2.2 presents the average prestige score of the first job by country and school-leavers' cohort. All in all, the figure shows moderate contextual variation. Viewing the overall country means (dashed lines), the prestige score of the first job is at the maximum level in the Netherlands and Belgium (around 43 points), whereas it is relatively low in the United Kingdom and Portugal (around 36 points). The other national contexts lie in between, with the Southern European countries scoring lower than Central and Northern European countries. However, overall country averages conceal a rising trend over time (solid lines): Later cohorts of school-leavers seem to



Source: Own Elaboration based on the EU-LFS 2009 ad hoc module 'Entry of young people into the labour market'

Figure 2.2 – Average prestige scores (SIOPS) by country and school-leavers' cohort

find more prestigious first jobs compared with earlier cohorts in all countries (with the exception of the UK, where average prestige scores are relatively constant over time). Needless to say, compositional effects (e.g. changes in the productive and occupational structure as well as modified gender and educational composition of the workforce) have to be kept in mind when considering these descriptive macro-scenarios.

To refine the analysis, the determinants of the SIOPS scores of the first job are analysed by means of multilevel models. Table 2.3 displays the results from four different random intercept specifications, which allows us to explore overall contextual differences in general and the role of the institutional settings in particular.[29]

Model 1 is a null model without explanatory variables. This model demonstrates that there is a statistically significant overall contextual variation in the average prestige score of the first job, albeit moderate (6.1). In fact, about 4% (intra-class correlation) of the overall variance can be explained by differences across combinations of country and school-leavers' cohorts.

Once individual covariates (Model 2) are controlled for, the overall contextual variation decreases from 6.1 to 2.2. The weight of the contexts (countries and cohorts) in explaining the differences among the prestige of the first job obtained by school-leavers is reduced, even if a small but significant variation across combinations of country and school-leavers' cohorts remains when individual characteristics are controlled for. Put differently, we observe the persistence of systematic differences across geographical and temporal contexts that – even if limited in magnitude – cannot be explained by compositional effects in terms of individual traits and resources.

Model 3 further explains the residual variance at the country-cohort level by including macro indicators for economic fluctuations and institutional characteristics.

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[29] For the sake of parsimony and in line with a plethora of sociological studies, we assume invariant effects of our micro-level variables across contexts rather than explicitly modelling heterogeneous effects (random slopes specifications). However, in the models, we intentionally include only those individual-level variables whose effects should have the same sign (if not similar magnitude) across contexts.

Table 2.3 – Multilevel models for analysing the prestige of the first job: coefficients

	Model 1	Model 2	Model 3	Model 4
Level 1 variables - Individuals				
Female (ref. Male)		-0.67**	-0.67**	-0.66**
Parental education (ref. Primary/lower sec.)				
Upper secondary		1.42**	1.42**	1.41**
Tertiary		3.39**	3.42**	3.43**
Level of education (ref. Primary/lower sec.)				
Upper secondary general		3.86**	3.89**	3.89**
Upper secondary vocational		3.88**	3.86**	3.84**
Tertiary		16.79**	16.81**	16.79**
Compulsory military service (ref. No)		0.50**	0.46*	0.47*
Level 2 variables - Country*School-leavers' cohort				
Macro indicators				
Vocational Orientation			5.27**	
Employment Protection Legislation			1.47**	
Product Market Regulation			4.48**	
Macro indicators – Between / Within components				
Between components *(95-09 country means)*				
Vocational Orientation				6.47**
Employment Protection Legislation				1.88**
Product Market Regulation				9.24**
Within components *(annual dev. from country means)*				
Vocational Orientation				-0.25
Employment Protection Legislation				0.31
Product Market Regulation				-0.74
Constant	39.15**	30.80**	30.27**	29.38**
Unexplained variance level 2	6.124	2.281	1.046	0.485
ICC (intra-class correlation)	0.0395	0.0214	0.00992	0.00463
N subjects	87,558	87,558	87,558	87,558
N country*school-leavers' cohort	255	255	255	255

Significance levels: ** p<0.01, * p<0.05

Models 3 and 4 control for unemployment rate (15-64) and GDP trends

The variance decreases from 2.2 to 1.1, thus indicating that part of the residual contextual variation is explained by systematic differences in terms of macro-economic conditions (GDP and unemployment rate), education, (VET), labour (EPL), and product market (PMR) institutions. The estimates related to EPL and PMR suggest that strict

regulations in the labour- and product market domains favour jobs of higher prestige at labour market entry (even if the influence of EPL is substantially quite limited).[30] There is also evidence that, overall, a strong VET system is associated with better entries in terms of prestige.

Hence, results from Tables 2.1 and 2.3 confirm the hypothesised macro-level trade-off originated by the macro regulatory arrangement (EPL and PMR) on the outcomes of the school-to-work transition: more regulations yield slightly better occupational entries but longer queuing. Moreover, Tables 2.1 and 2.3 confirm that only a strong VET favours better entries in terms of both prestige and (shorter) duration of the job search.

Finally, in Model 4, we replace the overall macro indicators with their between-country and within-country components. In this way, we exclude possible bias due to time-constant unobserved confounders at the country level and, at the same time, we are able to draw some tentative conclusions about the influence of the long-term contextual setting associated with each institutional condition and the effects of short-term institutional changes.

As hypothesised in Section 2.2 of this chapter, short-term institutional changes do not impact on the prestige of first employment. Moreover, the estimates of the between-components are quite close to estimates from Model 3. This suggests that the influence of institutions shown in Model 3 is mainly driven by unobserved macro-characteristics strictly related to the stable institutional settings considered. Consistent with our expectations, rather than exerting instantaneous effects on the occupational structure, the institutional characteristics we consider are connected with wider (and unobserved) contextual characteristics that – in the long-term – are associated with the average prestige obtained by school-leavers in their first job.

[30] Additional analyses have shown that PMR has stronger positive effects on the prestige score for women than for men (see Table A4 in the Appendix). These results are consistent with the idea – mentioned in the theoretical section – that stronger PMR prevents the expansion of low-skilled, female-dominated jobs in the service sector.

2.5 Discussion and conclusions

This chapter explored the process of individual transition from education to first significant employment in 17 European countries from 1995 to 2009. In doing so, I paid particular attention to the influence of several institutional characteristics on the speed of entry and on the prestige of the first significant job. In line with the overall design of the thesis, the contention here is that contextual differences in institutional arrangements play a role in explaining part of the observed variation in the patterns of labour market entry. In this respect, most existing sociological studies exclusively discuss the role of the vocational orientation of the educational system and the employment protection legislation, quite often assuming institutional stability over time. Conversely, I examined a further relevant institutional characteristic that has not yet been considered in the literature on the school-to-work transition: the amount of legal regulation of the product and service market. In addition, I jointly evaluated the role of the institutions in the empirical models and exploited both the geographical and temporal dimensions of the contextual variety. This strategy allowed us to explore the role of institutional factors that often correlate with each other and to rule out possible issues due to national idiosyncrasies. I also provided a tentative interpretation of the influence of the long-term contextual settings associated with each institutional characteristic and the effects of the specific short-term institutional changes.

Overall, this chapter has confirmed that part of the variation across countries and time-periods in the speed of entry and in the prestige of the first job can be attributed to institutional diversities. Table 2.4 summarises the main theoretical expectations and the main results.

The empirical findings are consistent with the idea that the average prestige is not influenced by short-term institutional change, but rather by long-standing processes of occupational upgrading and is therefore only responsive to long-term institutional settings. Instead, the speed of entry seems to be sensitive both to long-term settings and to short-term institutional changes.

The hypothesised trade-off between the speed of entry and occupational prestige exerted by the regulatory dimensions of labour and product market is corroborated.

Results are consistent with the idea that strict regulations in the domains of labour- and product market are responsible for the reduced number of vacancies and low turnover rates that cause delayed school-to-work transitions (*Hypotheses 3 and 5*). At the same time, more selective job searches and a relatively undersized low-skilled service sectors seem to represent plausible mechanisms accounting for the slightly higher average prestige found in contexts characterised by labour- and product market rigidities (*Hypotheses 4 and 6*).

Table 2.4 – Summary of hypotheses and main results

	Vocational orientation	Employment protection	Product market regulation
Speed of entry	✓	✓	✓
(both short- and long term)	*HP 1 Increase*	*HP 3 Decrease*	*HP 5 Decrease*
Prestige	✓	✓	✓
(only long term)	*HP 2 Increase*	*HP 4 Increase*	*HP 6 Increase*

The vocational orientation of the educational and training system alone seems to work as an institutional characteristic facilitating both speed and prestige (*Hypotheses 1 and 2*). The results are in line with the literature stressing the capacity of vocationally oriented educational systems to reduce the informational asymmetries between demand and supply of skills, which are likely responsible for delayed labour market entry processes. Moreover, results are also consistent with the expectation that vocationally oriented educational systems provide durable support to the labour demand for qualified job positions.

Finally, the chapter have contributed to further disentangling the role of the macro-institutional context by allowing for explicit interactions among some institutional spheres. First of all, the results have confirmed that labour market rigidities end up exerting detrimental effects on the speed of entry especially in presence of relevant informational asymmetries concerning applicants' skills (*Hypothesis 3a*). In line with Breen (2005) and Scherer (2005), it is questionable whether strict labour regulations have any negative side effects on the speed of transition in contexts with strongly vocationally oriented educational systems. From this point of view, a combination of

strict employment protection and high vocational orientation seems a viable strategy to ensure that the cons of institutional regulation do not outweigh the pros. This interpretation is also consistent with the prominent literature on *Varieties of Capitalism* discussed in chapter 1 (Hall and Soskice, 2001), which shows how the combination of a strict protection of employment relationships and a strong vocational orientation of the educational system leads to an efficient institutional equilibrium and good macro-economic performance in the long run. This scenario is even more plausible when we consider that, in the analyses, it is also found that long-term exposure to strict employment protection and strong vocational orientation boosts the average placement at labour market entry, allegedly *via* upgrading of the occupational structure.

I have also shown that the institutional configurations of labour and product market rigidities play a relevant role in predicting the smoothness of the school-to-work transition. Indeed, we have seen how both labour and product markets are significant sources of rigidity that are negatively associated with the fluidity of the labour market entry process. Nonetheless, the interplay between these regulative dimensions comes with a twofold implication: first, their additive negative effects are exacerbated in contexts characterized by the institutional combination of high labour market rigidity and strong product- and service market closure. Second, the marginal utility of deregulating one of these two sources of rigidity negatively depends on the amount of regulation of the other one (*Hypothesis 5a*). Once again, this makes evident how cross-country differences in transitions processes – and more generally in labour market performances – cannot be traced back to the influence of a single institutional characteristic. Rather, despite the different costs of embracing institutional reforms in labour- and product market spheres, there is some evidence that EPL and PMR can be conceived as economic substitutes, functional equivalents, and alternative policy levers to boost the speed of labour market entry.

In conclusion, paraphrasing Bertola (2014), I could say that no labour market configuration is optimal in all circumstances and from all points of view since markets are not as perfect as economists would like them to be, policy-makers are not as powerful as they would like to be, and policies that affect market efficiency have

different implications for the matching between demand and supply of labour, not mentioning the implications for the welfare of distinct social groups, i.e. for the distribution of social inequality.

CHAPTER 3

TEMPORARY EMPLOYMENT AT LABOUR MARKET ENTRY: LABOUR MARKET DUALISM, TRANSITIONS TO SECURE EMPLOYMENT AND UPWARD MOBILITY

Brief summary

This chapter focuses on school-leavers who enter employment with a temporary contract in the European context, and examines their probabilities to shift to standard employment or unemployment, and their chances of occupational mobility afterwards. I argue that two institutional dimensions of insider-outsider segmentation drive the career progression after a flexible entry: the gap between the regulation of permanent and temporary contracts and the degree of unionisation. The analyses show that a disproportionate protection of permanent compared to temporary contracts enlarges the probability of remaining in a fixed-term contract, whereas the degree of unionisation slightly decreases the chance of moving to jobs with higher or lower socio-economic status. Finally, a shift to permanent employment after a fixed-term entry is more often associated with occupational upward mobility in strongly rather than weakly unionised labour markets.

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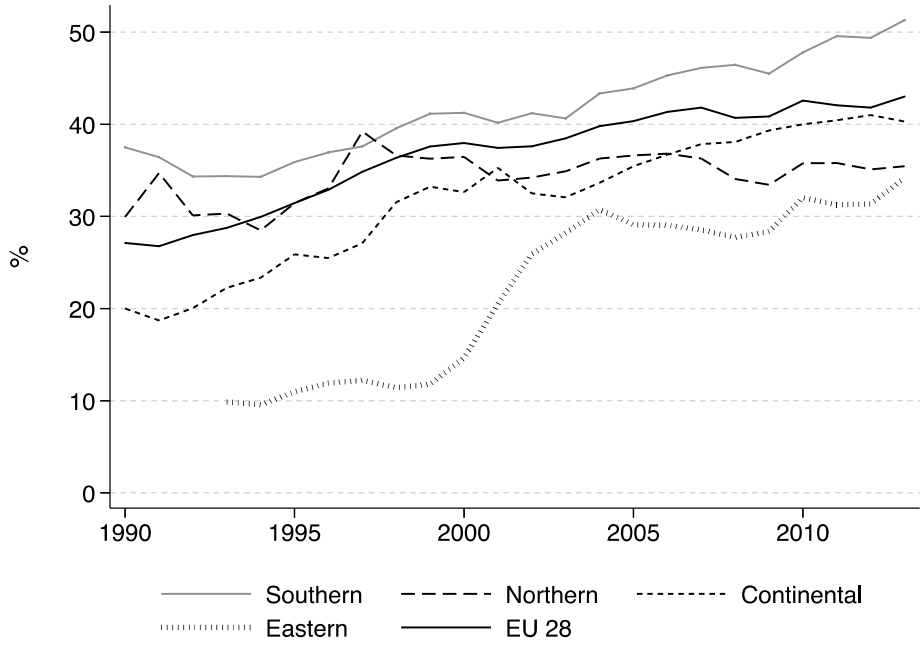
3.1 Introduction

A consolidated stream of research argues that temporary (or fixed-term) employment – as a specific instrument to cope with structural changes in the globalized economy – is the new source of social inequality in European labour markets (e.g. Barbieri, 2009; DiPrete, 2005; Maurin and Postel-Vinay, 2005). In fact, while some commentators argue that fixed-term contracts (hereafter: FTCs) facilitate firms' response to labour demand fluctuations, they are often overrepresented among low-paid and low-skilled jobs (Booth *et al*., 2002; Kalleberg *et al*., 2000). Moreover, the importance of employment flexibility in structuring inequality in Europe is even exacerbated in some national contexts, where standard and uninterrupted employment careers are the only connection to welfare entitlements, such as unemployment benefits or pension schemas (e.g. in Italy, see Barbieri and Scherer, 2009).

The rising demand for employment flexibility in the European context is reflected in the expansion of FTCs among the youth labour force, allegedly the most common target for flexibilisation practises (Barbieri, 2009; Blossfeld *et al*., 2008). In 2013, about 51% of young employees had a temporary contract in the Southern European countries, whereas this figure is slightly lower in continental Europe (40%), and sensibly lower in Northern (35%) and Eastern (34%) Europe (see Figure 3.1). However – despite these cross-regional differences – in the last two decades the incidence of temporary employment among the youth has increased steadily in all European countries. As already stressed in the first chapter of the thesis, the percentage of temporary workers among the youth in the European Union showed a significant increase from 27% in 1990 up to 43% in 2013.

These figures confirm that temporary jobs are part of the early phases of the employment career for many young Europeans. Therefore, it becomes relevant to examine the career progression of the youngsters who experienced employment flexibility at labour market entry. In fact, while being uncertain *per se,* fixed-term jobs at the start of the career could undermine future occupational development *via* low skill-accumulation and bad signalling, thus representing a trap for labour market entrants (de Lange *et al*., 2013; Gash and McGinnity, 2006; Gebel, 2010; Giesecke and Groß, 2003;

McGinnity *et al*., 2005; Scherer, 2004). Moreover – and crucially – previous studies suggest explicitly that the extent to which this entrapment scenario is likely to apply depends on the institutional context (Gash and McGinnity, 2006; Gebel, 2010; McGinnity *et al*., 2005; Scherer, 2004).



Source: Own elaboration based on OECD data (2014a)

Figure 3.1 – Youth temporary employment rates (% of total employees) in the EU–28 and in different country clusters in the period 1990-2013

Against this background, I focus on a pool of school-leavers who entered their first 'real' job (the first non-casual job lasted at least three months) with a FTC, and examine their probabilities to enter standard employment or unemployment/inactivity (versus remaining in temporary employment), and their chances of occupational mobility in a variety of institutional contexts. Specifically, we question whether institutionally driven segmentation into the labour market leads to worse early career developments for school-leavers who entered the first employment in FTCs.

The potential contribution of this chapter to the debate about the diffusion of temporary employment among young people is threefold. First, it contributes to the *stepping-stone vs. trap* debate, which considers alternatively FTCs at labour market

entry as entry-port to standard employment or trap into the bad segment of the labour market. In fact, this literature often found mixed results depending on the specific countries and periods analysed, but the reasons behind these variations are not well explored. Second, contrary to existing studies that considered institutional configurations only at a theoretical level by focusing on one or a few countries at most, this chapter compares a great number of countries (17) and a relatively large time-span (1995-2009), in order to parametrise micro-level outcomes on the basis of macro-level determinants. Third, the chapter focuses on the role of two interconnected institutional dimensions of labour market segmentation: the gap between the regulation of standard and temporary contracts and the strength of unions.

3.2 The entrapment argument

A good starting point to elucidate the entrapment argument is the *core-periphery* model developed by Atkinson (1984). Although somewhat dated, this model still offers useful insights for understanding the societal consequences of firms' distinction between permanent and temporary workers. In a nutshell, the model depicts the structure of the modern, flexible firm that organises its workforce in a core segment – an internalised, highly-skilled, well-paid and secure group of workers – from a periphery segment – typically a less-skilled group of workers hired on a temporary basis from the external labour market, and used to buffer from demand fluctuations. In this way, firms pursue both functional and numerical flexibility. Functional flexibility is guaranteed by the high-skill profile of core workers with permanent contracts, whereas numerical flexibility is guaranteed by the availability of temporary workers. Nowadays, the distinction between permanent and temporary contracts may have become more blurred and uncertain than in the 1980s when Atkinson developed his model, thus making possible that functional flexibility is also achieved *via* highly skilled workers hired on a temporary basis (Reilly, 1998). However, it is still more common that the core workers are offered permanent contracts in order to ensure long-lasting employment

relationships and avoid poaching, especially when firms' initial investment in training is conspicuous (Busemeyer, 2009).

At the aggregate level, this firms' organizational structure mirrors in the creation of a two-tier labour market, where a well-protected and rewarded group of workers in the primary segment is neatly separated from a less paid and protected group of workers in the secondary segment (Doeringer and Piore, 1985; Kalleberg, 2003). In this perspective, temporary workers in the secondary segment are outsiders compared to permanent workers – the insiders – in the primary segment (Lindbeck and Snower, 1989). One constitutive feature of this segmentation is its persistence over the life course, since in- and outflows from the two segments are scarce (*ibidem*).

Starting from this scenario, the entrapment hypothesis predicts that entering the labour market in FTCs, i.e. as outsiders, hinders future career development by means of two basic micro-level mechanisms that operate mainly on the external labour market. First – from a *human capital* perspective (Becker, 1962) – temporary jobs in the secondary segment may hinder skill-accumulation *via* poor working conditions and little or no formalised (possibilities for) training on-the-job (Cutuli and Guetto, 2013), thus making fixed-term entrants less attractive for future employers. Second – from a *signalling* perspective (Spence, 1973) – a flexible entry could represent a bad signal for prospective employers: 'why was the candidate not worth of a permanent position?' It can be argued that flexible entries can be negative signals irrespective of the actual quality of the job: it suffices that temporary jobs are considered inferior compared to permanent jobs.

Therefore, the precondition of the entrapment argument is that jobs on FTCs are – or are believed to be – part of the secondary segment, i.e. inferior jobs compared to standard employment. As a matter of fact, these two conditions are more likely to be satisfied if there is actual segmentation in the labour market between insiders' and outsiders' jobs, with temporary employment being part of the latter. Previous research is well aware of this issue, and usually claim that the extent to which the entrapment hypothesis is likely to apply depend on the actual level of insider-outsider segmentation

within a labour market (McGinnity *et al*., 2005; Scherer, 2004). I empirically test this specific contention.

In what follows, I focus on two interconnected institutional dimensions of labour market segmentation, and I elaborate hypotheses on the role of these dimensions in shaping the career progression after a flexible labour market entry in terms of contractual and occupational mobility. Contractual mobility is defined by shifts into labour market positions that are marked by a different contractual/employment status (permanent employment, unemployment, inactivity) compared to temporary employment (the origin state). Occupational mobility is defined by moves into job positions marked by higher or lower occupational status compared to the first job entered after leaving education.

3.3 Institutional dimensions of segmentation: theory and expectations

3.3.1 The gap between the regulation of standard and temporary contracts

The employment protection legislation (hereafter: EPL) summarises a series of institutional measures that regulate hiring and firing practises within national contexts (Boeri and van Ours, 2013). More precisely, the EPL for standard employment rules hiring and firing practises of permanent workers, whereas the EPL for temporary employment regulates specifically the procedures to hire workers on a temporary basis. However, while 'firing' is a different process compared to 'hiring', it can be argued that both measures can be read in terms of turnover costs: the stricter the regulation, the higher the turnover costs for employers. In fact – from the employer perspective – excessive hiring costs for temporary workers increase money loss in case of lay-offs, thus also representing firing restrictions.

The deregulation of employment relationships is one of the main instruments by which European labour markets have implemented flexibility in response to globalisation pressure. In fact, deregulation of the EPL facilitates hiring and dismissal

of workers, thus making it easier for employers to adjust the workforce according to demand fluctuations (Bertola and Rogerson, 1997). While boosting productivity growth (e.g. Autor *et al*., 2007), it has been questioned whether the increased flexibility reflected in lower job-satisfaction and well-being for workers, exposed to high level of uncertainty about their future (Böckerman *et al*., 2011; Salvatori, 2010).

However – in practice – the ways European labour markets implemented deregulation in employment relationships differ considerably among national contexts. In some countries, deregulation became the basic principle of labour market policies, whereas in other cases, it was introduced as controlled experiments and directed towards specific marginal groups (Regini, 2000). These processes of deregulation at the margins usually facilitated the volatility of temporary employment, while leaving the protection of standard employment largely unchanged (Barbieri, 2009; Cahuc and Postel-Vinay, 2002). Therefore, in many countries, this process of partial and targeted deregulation resulted in a disproportionate protection of permanent compared to temporary contracts.

The *gap* in the protection of permanent and temporary employment (hereafter: EPL gap) is nowadays recognized as one of the main institutional factors driving the insider-outsider segmentation in the labour market (Scarpetta *et al*., 2010; Barbieri and Cutuli, 2015; Polavieja, 2003). This is because when permanents contracts are disproportionally protected compared to FTCs, employers will tend to use FTCs as buffers from short-term fluctuations in the demand for basic tasks, due to their lower turnovers costs compared to standard employment. It follows that, when the EPL gap is high, jobs on FTCs are more likely to be in the secondary segment of the labour market (Centeno and Novo, 2012). As anticipated in the first chapter of the thesis (par. 1.4) and in section 3.2 of this chapter, in this insider-outsider setting, FTCs at labour market entry could hamper future career upgrading *via* low *human capital* accumulation and bad *signalling*.[32] However, a fixed-term entry is often considered better than

[32] Moreover, in contexts where EPL is disproportionally in favour of permanent contracts compared to FTCs, the inferior chances of being laid off 'without right cause' of the former can be considered a valuable and desirable condition independently of the individual preferences for

unemployment, that offers the worst chance of human capital accumulation and represent the worst signal for future employers (Gebel, 2013; Steijn *et al*., 2006).

In conclusion, high EPL gaps are likely to increase barriers among labour market segments and, by this way, to 'freeze' early career stages of fixed-term entrants. Compared to the situation where EPL is more balanced, fixed-term entrants in the context of a high EPL gap should be less likely to move into the primary segment – that is prerogative of permanent workers already part of the core workforce – but they should also be less likely to move to unemployment – that is prerogative of the even 'more' outsider labour force of whom never entered employment.

3.3.2 The role of unions

Another institutional dimension related to labour market segmentation is the strength of trade unions within a national context (Polavieja, 2003). According to *insider-outsider* theory, unions protect the interest of the unionised core workforce in the primary segment, whereas the interests of non-unionised people out of the labour market or in peripheral positions have no priority (Lindbeck and Snower, 1989). By contracting wages above the efficiency level and favouring institutional measures to protect the core workforce, unions maximize the interests of insiders, which has the side effect of transferring market risks to outsiders (*ibidem*).[33] In this process, unions bargain wages in a way that allows insiders to receive the highest possible wage without eroding their employment positions and their welfare benefits.

While in its early formulation the insider-outsider theory considered employed workers as insiders and unemployed workers as outsiders, recent contributions argue

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long- or fixed-term employment. It follows that – quality of fixed-term jobs being equal – FTCs at labour market entry are more likely to be perceived of inferior quality and represent bad signals in a context where the EPL gap is high compared to a context where EPL is more balanced.

[33] In this sense, deregulation at the margins and unionism are strongly related, since unions are likely to support directly dual EPL reforms in order to protect job security of insiders (Rubery, 1989).

that temporary workers can also be considered part of the outsider group, with no or with a very limited role in the bargaining process (Eichhorst and Marx, 2012; Rueda, 2005).

I argue that – to some extent – fixed-term labour market entrants in contexts of strong unionism are even 'more' outsiders compared to fixed-term entrants in contexts where unions have less market power. However, unions could also help youth integration into the labour market by favouring coordination among economic actors (Hall and Soskice, 2001), thus fostering also the partial integration of those who started to work in fixed-term employment. In this sense, as already anticipated in the first chapter of the thesis, unions seem to exert an ambivalent role for the career prospects of fixed-term entrants: they could hinder opportunities of upgrading to better-off jobs and to permanent contracts – but at the same time – they might also protect them from the risk of occupational downgrading and unemployment.

In fact, in contexts where unionism is weak, young people who entered employment in FTCs have the chance to move on the occupational ladder, since there are comparatively few restrictions to occupational and contractual mobility – that could occur in all directions, however. Conversely, in contexts where unionism is strong, young people who entered employment in FTCs have less mobility chances. On the one hand, strong unions control the access to core jobs, and therefore impede occupational and contractual upgrading after a fixed-term entry. On the other hand, unions are likely to protect the interests of all workers (Hyman, 2001) – at least to some extent – and therefore fixed-term entrants will be less likely to move to unemployment in contexts of strong unionism compared to contexts of weak unionism. Moreover, strong unionism might enlarge differences among fixed-term entrants by attaching them specific degrees of 'outsiderness' on the basis of the quality of the first job they entered. More precisely, in contexts of strong unionism, fixed-term entrants can be considered outsiders compared to their counterparts who entered employment in higher occupational status, and insiders compared to their counterparts who entered employment in lower occupational status. In such scenario, school-leavers who entered employment in FTCs

might be more protected from occupational downgrading in contexts of strong unionism than in contexts of weak unionism.

All in all, strong unionism is likely to generate or at least to reinforce the segmentation of the labour market, thus reducing contractual and occupational mobility (in all directions) after a flexible labour market entry.

3.3.3 Hypotheses

I discussed how both a high EPL gap and strong unions – although by means of different mechanisms – generate barriers across labour market segments, thus hindering mobility between the primary and secondary segment, but also between the secondary segment and unemployment. Therefore, I expect both institutional dimensions of labour market dualism to affect similarly the subsequent contractual/employment status of fixed-term entrants. With respect to the EPL gap, I expect fixed-term entrants to be more likely to remain in temporary employment in the early career in contexts where there is a strong EPL gap compared to fixed-term entrants in contexts where EPL is more balanced (*Hypothesis 1*). In a similar fashion, I expect fixed-term entrants to be more likely to remain in temporary employment in the early career in contexts of strong unionism compared to fixed-term entrants in contexts where unions are comparatively weaker (*Hypothesis 2*).

However, the theoretical discussion leads to slightly different predictions of the effects of the two institutional dimensions on the probability of occupational mobility. Regarding the EPL gap, low *human capital* accumulation and bad *signalling* might prevent fixed-term entrants to move their way up on the occupational ladder in contexts where permanent employment is disproportionally protected compared to temporary employment. Therefore, I expect fixed-term entrants to be less likely to upgrade on the occupational ladder in contexts where there is a strong EPL gap compared to fixed-term entrants in contexts where EPL is more balanced (*Hypothesis 3*). Nevertheless, the effects of the EPL gap on the probability of downward occupational mobility are largely unpredictable – at least on the basis of our theoretical discussion.

Regarding the role of trade unions on the probability of occupational mobility after a fixed-term entry, predictions are more in line with the idea of 'frozen' early careers when unions have strong market power. Indeed, strong unions are likely to protect the access to insider jobs, but, at the same time, unions are likely to attach different degrees of 'outsiderness' to fixed-term entrants, thus preventing them from downgrading to even worse occupational positions later in life. For these reasons, I expect fixed-term entrants to be less likely to both up- and downgrade on the occupational ladder in contexts of strong unionism compared to contexts where unions are comparatively weaker (*Hypothesis 4*).

The last hypothesis tries to relate the two labour market outcomes considered: contractual and occupational mobility after a fixed-term entry. Contract type and occupational status are two important characteristics for the evaluation of the overall quality of a job. However, some individuals might have a preference for job stability, whereas others might strive for their socio-economic status. Nevertheless, as extensively discussed in the theoretical framework of the thesis, individual preferences and choices are shaped and constrained by structural, cyclical and institutional factors (see par. 1.2.2 in the first chapter). For example, individuals may have fewer opportunities to choose between type of contract and occupational status when high unemployment rates reduce the vacancies available on the labour market, or when – given the occupational structure – high status jobs require long-lasting employment relationships.[34]

In this respect, I argue that the institutional dimensions of the insider-outsider segmentation we considered are two of the main factors constraining individual preferences and choices. Indeed, when labour market segmentation is weak, FTCs are not necessarily bad jobs in the secondary segment, and therefore, fixed-term entrants with a specific preference for temporary employment can upgrade on the occupational ladder without necessarily upgrading to a permanent position. In this context, a weak

[34] For example, when both firms and workers have to protect the initial investment in firm-specific skills (see Busemeyer, 2009).

positive or even no association between contract type and occupational upgrading can be expected.

Conversely, when the insider-outsider segmentation is strong, FTCs are often overrepresented among low-status occupations in the secondary segment, whereas permanent contracts are often attached to high-status jobs in the primary segment. In this context, a contractual upgrading after a fixed-term entry is more likely to come along also with an upgrading in terms of occupational status, and vice versa. Therefore, I expect a stronger positive association between contractual and occupational upgrading after a fixed-term entry in contexts with a strong EPL gap compared to contexts where EPL is more balanced (*Hypothesis 5*). In the same fashion, I expect a stronger positive association between contractual and occupational upgrading after a fixed-term entry in contexts of strong unionism compared to contexts where unions are comparatively weaker (*Hypothesis 6*).

3.4 Research design

3.4.1 Data

This chapter uses data from the standard Eurostat 2009 Labour Force Survey combined with data from the *ad hoc* module 'Entry of Young People into the Labour Market' already used in chapter 2. This combination of data provides specific retrospective information on both the first relevant job obtained after leaving formal education and the current occupational position (in 2009) of people aged 15-34 in 31 European countries.[35] As for chapter 2, I analyse only the 17 European countries for which comparable macro-indicators and reliable micro-data were available.[36]

[35] The first relevant job is defined as the first non-casual paid job lasting at least three months. Apprenticeship, unpaid traineeship, summer jobs and compulsory military or community services are not considered as first significant employment spells.

[36] They are Austria, Belgium, Czech Republic, Denmark, Finland, France, Greece, Hungary, Ireland, Italy, The Netherlands, Norway, Poland, Portugal, Slovak Republic, Spain and Sweden. As in chapter 2, Switzerland and Germany are excluded from the analysis due to concerns about

I restricted the overall sample to young people who entered the labour market for the first time in temporary employment, in order to focus on contextual differences in the early occupational careers of flexible labour market entrants. In compliance with the definition of the 'school-to-work transition' given in the very beginning of the thesis (see par 1.1 in chapter 1), this chapter only focuses on early career mobility by looking at the first 15 years (maximum) after the first labour market entry. Therefore, the empirical analysis is restricted to respondents whose last exit from formal education is between 1995 and 2009.

Unfortunately, the *ad hoc* module collected information on the contract type of the first job exclusively for those who changed the first employer, i.e. for those who moved on the external labour market.[37] However, in our case, this selection should not be problematic, since the micro-level mechanisms behind the entrapment argument (low skill-accumulation and bad signalling) operate mainly with respect to new potential employers rather than to the same employer. Therefore – given the focus of the chapter on the role of institutions *via* these specific mechanisms – the external labour market is the most appropriate circumstance to study contextual variations in the entrapment dynamics.

After these selections and list wise deletion of missing values, the overall sample includes a maximum of 20,050 cases for which we have data both on individual and contextual characteristics.

3.4.2 Variables and methods

The first dependent variable is the contractual mobility between the first significant job and the employment situation at the moment of the interview (in 2009). The current

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data comparability (see Eurostat [2012] for Switzerland and Wingerter [2011] for Germany). The United Kingdom is excluded due to very limited number of cases.

[37] In any case, the questionnaire specifically asked the contract offered by the first employer after all possible probation periods.

employment status is measured by distinguishing four categories: temporary employment, permanent employment, unemployment, and inactivity.[38]

The second dependent variable is the occupational mobility between the first significant job and the current job in terms of occupational status. Occupational status is measured by means of the International Socio-Economic Index (ISEI) (Ganzeboom *et al.*, 1996) on the basis of information from the ISCO-88 classification. Upward and downward moves are defined as moves of at least six percentage points on the ISEI scale. The final variable includes three categories: upward mobility, downward mobility, and stability.

The main independent variables refer to two different institutional dimensions of labour market segmentation: EPL gap and union strength. Both variables are measured at the country-year level and matched to individuals according to their year of exit from the first job, allegedly the moment when they re-started the job search.[39]

The EPL gap is measured as the difference between the employment protection for standard and temporary employment in a given country and year. Positive values of the index indicate insider-outsider segmentation, whereas the value of 0 indicates that permanent and temporary jobs are equally protected, i.e. no segmentation.[40] Figures for the EPL strictness for regular and temporary contracts are taken from the relative time-series released by the OECD in 2013. We use the difference instead of the ratio, since the EPL gap argument is essentially about differences in turnover costs between temporary and permanent workers, which are by definition very low in both cases when

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[38] Self-employed and family workers at the moment of the interview are excluded from the analysis due to low number of cases in most countries. However, their inclusion in the 'permanent employment' or in the 'temporary employment' categories does not substantially change the main results.

[39] Due to empty cells in three country-year combinations (Denmark 1995, Norway 1995 and 1996), the analysis is based on 252 effective country-year combinations and not 255.

[40] Negative values could occur when FTCs are more protected than permanent contracts. However, since insider-outsider segmentation by type of contracts refers to situations where permanent contracts are disproportionally protected compared to FTCs, negative values of the index are imputed to 0, i.e. no segmentation.

both indices approximate the value of 0, even in presence of strong positive values of the ratio.

Union strength is approximated by the OECD 'union density index', which measures the percentage of wage and salary earners that is member of a trade union over the total amount of wage salary earners in a given country and year. Although union density may be an imperfect and incomplete measure of strength, it still represents a critical resource for unions' power (Visser, 1992; Piazza, 2005; Sullivan, 2009). Unfortunately, an alternative measure of union strength, such as the coverage of collective wage agreements, is simply not available longitudinally for many of the countries considered.

Both independent institutional variables are normalized to vary between 0 and 10, which represents the overall theoretical range of variation.

In the last part of the empirical analysis, the focus is on the contextual heterogeneity in the relation between contractual and occupational mobility. Here, the main independent variable is the shift to a permanent job, which measures whether fixed-term entrants are integrated in standard employment at the moment of the interview (1=yes).

A series of individual-level characteristics that are likely to affect the probability of contractual and occupational mobility after a fixed-term entry is controlled for. More precisely, we include in all models the variables sex, age, parental education (high, medium, low), level of education (primary or lower secondary, upper secondary, tertiary), field of study of the highest level of education attained (general, social sciences and humanities, natural sciences and technical disciplines, health and welfare), and a cardinal variable measuring the time since the last exit from the education system (until the year of the interview).

Unfortunately, some relevant characteristics concerning the first job are not available, such as the sector of employment, and – in this respect – field of study represents only a weak *proxy*. We exclude from the models the ISEI score of the first job, since the low quality of temporary jobs in segmented labour markets is cause and

part of the mechanism (the *human capital* mechanism) that could explain the reduced contractual and occupational mobility patterns in those contexts.[41]

In addition to individual-level variables, a large set of macro-level factors are considered in order to control for contextual differences that are possibly correlated both with the institutional dimensions of segmentation and the outcomes of interest. As for the institutional variables, also these variables are matched to individual data according to the national context and the year of exit from the first job.

The total unemployment rate and the GDP per capita (USD - divided by 5,000) are used to control for cyclical and structural economic factors, respectively. Figures for these measures are taken from the World Bank. The total share of temporary workers over the overall amount of employees, as measured by OECD data, is used to account for the diffusion of temporary employment in different countries and years, which may itself explain the higher or lower propensities of having FTCs later in life. The inclusion of this variable is particularly important, since a relevant number of studies found a positive association between our institutional dimensions of segmentation and the diffusion of temporary employment, particularly for young people (see Hipp *et al.*, [2015] for a review).

The difference between the youth and total unemployment rate is used as a measure of age divide in the distribution of labour market risks. In fact, there are good reasons to believe that the two institutional dimensions of segmentation are positively related to the relative disadvantage of all the young workers compared to the more experienced labour force (e.g. Barbieri, 2009). Therefore, I include the age divide variable in order to ensure that the effect of the institutional dimensions of interest hold for fixed-terms

[41] In doing so, I provide a conservative test of our hypothesis, which predicts a negative relationship between the degree of segmentation and the probability of moving upward. Indeed, on the one hand, higher segmentation entails lower quality of FTCs, whereas, on the other hand, those who entered the first employment in low quality jobs have inherently the higher probability of moving upward. Therefore, excluding the ISEI of the first job might even result in a positive association between segmentation and the probability of moving upward, an outcome starkly in contrast with our initial hypothesis (the same rationale applies with regard to the probabilities of moving downward).

entrants in particular, and not for all young people in general. The higher the value of the index, the more young people are disadvantaged compared to more experienced workers. Descriptive statistics for all variables used are reported in Table 3.1.

Given the categorical nature of our dependent variables, multinomial logistic regression models with macro-area fixed effects are estimated (Southern, Northern, Continental, and Eastern European countries).[42] In this setting, the identification of the partial associations of interest relies on cross-country and longitudinal variations occurring within each specific macro-area, i.e. in a context of relative 'similarity' among countries. In this way, we rule out the possible confounding effects of time-constant factors at the macro-area level for which we are unable to include specific macro-indicators at the country-year level (such as the generosity of welfare provisions).

[42] Results for the Small-Hsiao tests for the independence of irrelevant alternatives assumption (IIA) can be found in the Appendix (Tables A5, A6, A7).

Table 3.1 – Description of the variables (N=20,050 – unless specified otherwise)

	Min	Max	Mean	SD		Min	Max	Mean	SD
DEPENDENT									
Contractual mobility					*Level of education*				
Temporary	0	1	0.23		Primary or lower secondary	0	1	0.21	
Permanent	0	1	0.48		Upper secondary	0	1	0.49	
Unemployment	0	1	0.18		Tertiary	0	1	0.30	
Inactivity	0	1	0.11		*Field of study*				
Occupational mobility (N=13,833)					General programs	0	1	0.31	
Upward	0	1	0.37		Social sciences and humanities	0	1	0.37	
Downward	0	1	0.22		Hard sciences and tech.disc.	0	1	0.25	
Stability	0	1	0.41		Health and welfare	0	1	0.07	
MAIN INDEPENDENT – CONTEXTUAL (N=252)					*Age in 2009*	17	32	27.14	4.14
EPL gap	0	4.68	1.48	1.29	*Time since last exit from education*	0	14	7.27	3.84
Unions strength	0.75	8.31	3.68	2.13	*Macro European regions* [a]				
MAIN INDEPENDENT – INDIVIDUAL					Southern	0	1	0.40	
Shift to permanent (N=13,833)					*Northern*	0	1	0.13	
No	0	1	0.32		*Continental*	0	1	0.27	
Yes	0	1	0.68		*Eastern*	0	1	0.20	
CONTROLS – INDIVIDUAL					*CONTROLS – CONTEXTUAL (N=252)*				
Sex					*Total unemployment rate*	2	23	8.40	4.13
Male	0	1	0.48		*Age divide (youth unemp – total unemp)*	1.1	23.20	10.06	5.39
Female	0	1	0.52		*GDP per capita*	0.72	19.04	5.18	3.15
Parental education					*% Temporary employment*	3.56	35.01	12.64	6.79
Primary or lower secondary	0	1	0.50		*EPL regular*	2.12	7.64	4.18	1.10
Upper secondary	0	1	0.33						
Tertiary	0	1	0.17						

Notes: [a] *Southern: Italy, Spain, Greece, Portugal. Northern: Denmark, Finland, Norway, Sweden. Continental: Austria, Belgium, The Netherlands, France, Ireland. Eastern: Czech Republic, Hungary, Poland, Slovak Republic.*

3.5 Findings

3.5.1 Contractual mobility

Table 3.2 reports the empirical results from the multinomial logistic regression models analysing the log odds of entering standard employment (left panel) and unemployment (right panel) versus remaining in temporary employment after a flexible entry.[43]

Model 1 is a baseline model that shows the impact of a series of individual-level covariates once overall differences across European macro-regions are controlled for. This model clearly shows that women who entered the market in flexible employment are less likely to move to permanent jobs rather than remain in FTCs compared to their male counterparts (b= –0.18). Moreover, this propensity increases both with parental education and especially the level of education of school-leavers. Yet, the time between school-leaving and the year of interview – which can be interpreted roughly as labour market experience – is positively associated with the likelihood of obtaining a permanent contract rather than remaining in a temporary position (b=0.15). However, looking at the log odds of being unemployed rather than in temporary employment, we generally found neither statistical nor substantial significant associations. A noteworthy exception is the level of schooling: indeed, tertiary education seems to significantly prevent fixed-term entrants to enter unemployment rather than remaining in a temporary position later in life.

In Model 2 – in addition to individual variables and macro area fixed-effects – I include several macro-level confounders: the total unemployment rate, the GDP per capita, the percentage of temporary workers in the labour force, and a variable measuring the age divide in the labour market. This specification allows us to explore the role of the abovementioned macro-level variables, even if one should bear in mind that it is not specifically designed to systematically evaluate the role of these contextual

[43] Results for being 'inactive vs. temporary employed' text can be found in the Appendix (Table A8).

Table 3.2 – Multinomial logistic models to analyse contractual mobility after a fixed-term entry: Permanent employment and Unemployment VS Temporary employment

	Permanent VS Temporary					*Unemployment VS Temporary*				
	M1	M2	M3	M4	M5	M1	M2	M3	M4	M5
Female (ref. Male)	-0.18***	-0.19***	-0.18***	-0.19***	-0.18***	-0.03	-0.03	-0.01	-0.03	-0.01
Parental education (ref. Primary/lower sec.)										
Upper secondary	0.29***	0.25***	0.22***	0.25***	0.22***	0.08	0.03	-0.03	0.03	-0.03
Tertiary	0.20*	0.20*	0.18*	0.20*	0.18*	0	-0.02	-0.05	-0.02	-0.05
Level of education (ref. Primary/lower sec.)										
Upper secondary	0.45***	0.45***	0.39***	0.44***	0.38***	-0.16	-0.2	-0.32***	-0.2	-0.32***
Tertiary	0.56***	0.68***	0.57***	0.68***	0.57***	-0.58**	-0.67***	-0.88***	-0.66***	-0.88***
Field of study (ref. General programmes)										
Social sciences and humanities	0.06	0.02	0.07	0.03	0.07	-0.11	-0.06	0.05	-0.06	0.05
Hard sciences and technical disciplines	0.10	0.07	0.12	0.08	0.12	-0.05	-0.01	0.08	-0.01	0.08
Health and welfare	-0.08	-0.10	-0.07	-0.10	-0.07	-0.81***	-0.77***	-0.70***	-0.77***	-0.70***
Age in 2009	0.02**	0.01	0.01	0.01	0.01	-0.02	-0.01	-0.01	-0.01	-0.01
Time since last exit from education	0.15***	0.11***	0.09***	0.11***	0.09***	0.02	0.02	-0.01	0.02	-0.01
Macro indicators (country*year)										
Total unemployment rate		0.06***	0.05***	0.06***	0.06***		0.11***	0.11***	0.11***	0.11***
Age divide (youth – tot unemp)		-0.05**	-0.08***	-0.05**	-0.08***		-0.06*	-0.11***	-0.06*	-0.11***
GDP per capita		-0.09**	-0.12***	-0.08**	-0.12***		0.11*	0.03	0.11*	0.03
% Temporary employment		-0.05***	-0.06***	-0.05***	-0.60***		-0.03**	-0.05***	-0.03**	-0.05***
EPL regular			-0.07		-0.06			-0.13		-0.14
Epl-Gap			**-0.12****		**-0.13****			**-0.26****		**-0.25***
Unions strength				**0.03**	**0.03**				**-0.02**	**-0.02**
Constant	-1.61***	0.62	1.98***	0.53	1.80***	0.51	0.2	2.74**	0.27	2.85***
Observations	20,050	20,050	20,050	20,050	20,050	20,050	20,050	20,050	20,050	20,050
Macro Area FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

Significance levels *** p<0.01, ** p<0.05, * p<0.1 (clustered standard errors)

characteristics. First, the higher the unemployment rate, the higher the propensity of moving out of fixed-term contracts, and especially of moving to unemployment. Second, the higher the GDP per capita, the lower the likelihood of moving to permanent employment rather than remaining in FTCs. This finding may sound counterintuitive, but it might be the result of a lower preference for permanent contracts in wealthier national systems, where the future might be perceived overall less uncertain. Third, the higher the overall share of temporary workers in the labour force, the higher the propensity of remaining in temporary employment rather than moving to permanent jobs or to unemployment. Fourth, the higher the age divide on the labour market, the higher the likelihood of remaining in temporary employment after a flexible entry.

In Models 3 and 4, I add to the previous specification all macro-level confounders and the two institutional variables of interest considered separately. These models allow us to examine the role of specific institutions when individual and other macro-level confounders are controlled for. Model 3 examines the role of the EPL gap, and therefore it includes also the EPL index for regular contracts to avoid estimates being completely driven by the overall level of employment protection. This model shows that a disproportionate protection of permanent compared to temporary contracts – independently of the overall level of protection – comes along with a lower propensity of moving out of temporary employment after a fixed-term entry. In fact, both the likelihood of having permanent jobs (b= –0.12) and being unemployed (b= –0.26), rather than having FTCs, decrease significantly as the EPL gap increases. In other words – consistently with hypothesis 1 – institutionally driven segmentation in terms of EPL gap comes with higher contractual immobility for fixed-term entrants.

Model 4 examines the role of union strength on the probability of moving out of temporary employment towards permanent employment or unemployment versus remaining in temporary employment. Contrary to hypothesis 2, the model shows no statistically significant effects of union strength. Therefore, I can conclude that the strength of unions does not affect the likelihood of moving neither to permanent employment nor to unemployment after a flexible labour market entry.

Finally, Model 5 jointly tests the role of the two institutional dimensions of segmentation when controlling for all other covariates. This model provides a further test of the hypotheses, and establishes whether the two institutional dimensions of segmentation exert separate effects on the outcome of interest. This model fully confirms the results from previous specifications: higher EPL gaps are accompanied with higher contractual immobility after a flexible entry independently of union strength (both towards permanent employment and towards unemployment), whereas unions seem not to exert a relevant role in this regard.

3.5.2 Occupational mobility

Table 3.3 presents the empirical results from the multinomial logistic regression models analysing the log odds of moving upward (left panel) and downward (right panel) versus remaining stable on the occupational scale after a flexible entry. The analytical sample is limited to people who are employed at the moment of the interview.

Model 1, once again, starts with the inclusion of individual-level variables and the macro-area dummies. This model shows that the propensity of moving upward is higher for men compared to women, whereas the propensity of moving downward seems not to differ across gender. Interestingly, the log odds of moving upward (*b*= 0.03) or downward (b= 0.03) rather than remaining stable increases as an individual's potential labour market experience increases, thus suggesting that labour markets tend to adjust initial skill-job mismatches during the first stages of the occupational career. Finally, level of education seems generally to protect from downgrading risks, but is not associated with the log odds of upgrading further on the occupational scale. This result is consistent with better educated school-leavers having better skill-job matches and higher socio-economic positions at labour market entry, also among fixed-term entrants.

In Model 2, the effects of the individual-level variables are jointly estimated with contextual characteristics such as cyclical and structural economic factors, the overall share of temporary workers, and a variable measuring the age divide in the labour market. Although not specifically intended to detect systematically the role of the

Table 3.3 – Multinomial logistic models to analyse occupational mobility after a fixed-term entry: Upward and Downward mobility VS Stability

	Upward VS Stability					*Downward VS Stability*				
	M1	M2	M3	M4	M5	M1	M2	M3	M4	M5
Female (ref. Male)	-0.12*	-0.12*	-0.12*	-0.12*	-0.12*	0.05	0.05	0.05	0.05	0.05
Parental education (ref. Primary/lower sec.)										
Upper secondary	0.08	0.09**	0.09**	0.08*	0.09**	-0.06	-0.04	-0.05	-0.05	-0.05
Tertiary	0.05	0.05	0.06	0.06	0.06	0.02	0.03	0.02	0.03	0.02
Level of education (ref. Primary/lower sec.)										
Upper secondary	0.05	0.09	0.09	0.1	0.1	0.04	0.07	0.06	0.09	0.07
Tertiary	-0.05	-0.02	0	-0.01	-0.01	-0.38**	-0.38***	-0.40***	-0.36***	-0.40***
Field of study (ref. General program)										
Social sciences and humanities	-0.11	-0.12*	-0.12	-0.12*	-0.13	-0.13	-0.13	-0.12	-0.15*	-0.12
Hard sciences and technical disciplines	-0.22**	-0.23**	-0.24**	-0.24**	-0.24**	-0.15	-0.16	-0.15	-0.17*	-0.15
Health and welfare	-0.63***	-0.66***	-0.67***	-0.67***	-0.67***	-0.72***	-0.75***	-0.74***	-0.76***	-0.74***
Age in 2009	0.02	0.01	0.01	0.01	0.01	-0.01	-0.02	-0.02	-0.02	-0.02
Time since last exit from education	0.03*	-0.01	0	-0.01	0	0.03**	0.01	0.01	0.01	0.01
Macro indicators (country*year)										
Total Unemployment rate		0.07***	0.07***	0.07***	0.07***		0.05**	0.05*	0.05**	0.04*
Age divide (youth unemp - total unemp)		-0.06***	-0.05***	-0.06***	-0.05***		-0.04**	-0.05***	-0.04**	-0.04***
GDP per capita		-0.08***	-0.08***	-0.09***	-0.09***		-0.04	-0.04	-0.04*	-0.06**
% Temporary employment		-0.02	-0.01	-0.02*	-0.02**		0	-0.01	-0.01	-0.01
EPL regular			0.00		-0.04			0		-0.07
Epl-Gap			**0.02**		**0.06**			**-0.03**		**0.02**
Unions strength				**-0.05**	**-0.07****				**-0.09*****	**-0.11*****
Constant	-0.69***	0.51	0.35	0.73	0.83	-0.25	0.28	0.46	0.64	1.19*
Observations	13,833	13,833	13,833	13,833	13,833	13,833	13,833	13,833	13,833	13,833
Macro Area FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

Significance levels *** p<0.01, ** p<0.05, * p<0.1 (clustered standard errors)

above-mentioned contextual features, it is worth to take a closer look at the results. First, school-leavers who entered the labour market in FTCs seem more likely both to upgrade and to downgrade on the occupational scale in times of bad economic circumstances than in times of low unemployment. This result clearly indicates polarisation in the mid-term occupational outcomes of fixed-term entrants in times of economic downturns. However, structural factors – such as the GDP pro capita – are positively associated with occupational 'immobility' after a fixed-term entry. Finally, the overall share of temporary workers in the labour market seems not to be associated with the propensity of moving on the occupational ladder afterwards.

In Models 3 and 4 I test hypotheses 3 and 4 by adding separately the two indicators for the institutional dimensions of labour market segmentation. As for contractual mobility, Model 3 examines the role of the EPL gap, and therefore includes also a variable indicating the EPL strictness of regular contracts to avoid estimates being completely driven by the overall level of employment protection. This specification clearly shows that a disproportionate protection of permanent contracts compared to FTCs does not affect the propensity of moving upward or downward on the occupational scale after a fixed-term entry. Therefore, hypothesis 3 cannot be supported.

In Model 4, I test hypothesis 4 against the data by including the union strength indicator. Interestingly, net of other individual and macro-level confounders and comparing similar countries, there is a negative association between the degree of unionisation and the likelihood of moving downward (b= –0.09) on the occupational ladder, and a negative (b= –0.05), but not statistically significant association with the likelihood of moving upward. This result provides only partial support for hypothesis 4, which predicted less occupational mobility in contexts of strong unionism compared to contexts of relatively weak unions.

Finally, Model 5 provides a further test for our research hypotheses by estimating simultaneously the effects of the EPL gap and union strength. On the one hand, even controlling for the role of unions, disproportions in the protection of regular and temporary employment are not associated with the propensity of moving on the occupational ladder. On the other hand, the hypothesis about the role of unionism finds

more robust corroboration when the legislative arrangement in terms of protection of permanent and temporary contracts is taken into account: the higher the union strength, the higher the occupational immobility after a fixed-term entry.

3.5.3 Are contractual and occupational mobility systematically related?

Table 3.4 once again reports the results from the multinomial logistic regression models analysing the log odds of moving upward (left panel) and downward (right panel) versus remaining stable on the occupational scale, but the focus now is on the relation between contractual and occupational mobility. Also in this case, the analytical sample is limited to people who are employed at the moment of the interview.

Model 1 includes only a key variable detecting whether respondents shifted to a permanent job or not, and the individual-level variables and macro-area fixed effects as controls. This model shows that the likelihood of being upward mobile rather than immobile is higher for fixed-term entrants who shifted to a permanent contract compared to fixed-term entrants who remained in a temporary position (b=0.22) – net of relevant individual-level characteristics and overall contextual differences among European macro-regions. In the same vein, a shift to a permanent contract is negatively associated with the propensity of moving downward rather than remaining stable (b= –0.20). Therefore, generally speaking, contractual and occupational upward mobility after a fixed-term entry seem to be strictly related. This scenario is fully confirmed once heterogeneities within macro-regions in terms of cyclical, structural, and institutional factors are controlled for (see Model 2).

In model 3 and 4 I specifically test hypotheses 5 and 6 by adding an interaction term for the variable indicating a shift to permanent employment and the indicators for the EPL gap and union strength, respectively.[44] Since the substantive interest is the

[44] I am aware that interpretation of interaction effects in nonlinear models is not straightforward. As shown in Ai and Norton (2003), in some cases interaction effects in nonlinear models could not be equal to marginal effects both in terms of sign and statistical significance. However, this problem can be solved computing and interpreting main and interaction effects in multiplicative terms or switching to predicted probabilities (Buis, 2010). The results presented in the chapter

association between contractual upgrading and the likelihood of moving upward, results regarding the likelihood of moving downward are not discussed. The results are as follows. On the one hand (see Model 3), the main effect of the variables detecting a shift to a permanent job is positive and significant (b=0.20), while its interaction coefficient with the EPL gap is nearly 0. Therefore, contrary to hypothesis 5, a shift to permanent employment seems to come along with a higher propensity of upward mobility in all contexts, and not specifically in contexts where the insiders-outsider segmentation in terms of the EPL gap is stronger. On the other hand (see Model 4), the coefficient of the interaction term with union strength is positive and significant (b=0.04), and the main effect of this variable is positive, but not statistically significant. This suggests that, in line with hypothesis 6, contractual and occupational upgrading are more likely to come together in more segmented rather than less segmented labour markets, at least when insider-outsider segmentation in terms of union strength is considered.

Finally, model 5 confirms previous findings by estimating the two interaction terms simultaneously: upward mobility and contractual upgrading come together irrespective of the EPL gap, but their positive association is stronger in more segmented markets in terms of union strength.

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do not change substantially when coefficients are interpreted on a multiplicative scale or when the predicted probabilities are computed.

Table 3.4 – Multinomial logistic models to analyse the relation between contractual and occupational mobility after a fixed-term entry: Upward and Downward mobility VS Stability

	Upward VS Stability					*Downward VS Stability*				
	M1	M2	M3	M4	M5	M1	M2	M3	M4	M5
Female (ref. Male)	-0.12*	-0.12*	-0.12*	-0.12*	-0.12*	0.04	0.04	0.04	0.04	0.04
Parental education (ref. Primary/lower sec.)										
Upper secondary	0.07	0.08*	0.08**	0.07*	0.08*	-0.05	-0.04	-0.04	-0.04	-0.04
Tertiary	0.04	0.05	0.05	0.05	0.05	0.03	0.03	0.03	0.03	0.03
Level of education (ref. Primary/lower sec.)										
Upper secondary	0.03	0.08	0.08	0.09	0.09	0.06	0.08	0.08	0.12	0.08
Tertiary	-0.07	-0.02	-0.02	-0.03	-0.02	-0.36**	-0.38***	-0.38***	-0.33**	-0.38***
Field of study (ref. General program)										
Social sciences and humanities	-0.11	-0.13	-0.13*	-0.13*	-0.13*	-0.13	-0.12	-0.12	-0.15*	-0.12
Hard sciences and technical disciplines	-0.23**	-0.25**	-0.24**	-0.25**	-0.25**	-0.15	-0.15	-0.14	-0.17	-0.15
Health and welfare	-0.63***	-0.68***	-0.67***	-0.67***	-0.68***	-0.72***	-0.74***	-0.74***	-0.77***	-0.75***
Age in 2009	0.02	0.01	0.01	0.01	0.01	-0.01	-0.02	-0.02	-0.02	-0.02
Time since last exit from education	0.02	-0.01	-0.01	-0.01	-0.01	0.04***	0.02	0.02	0.02	0.02
Macro indicators (country*year)										
Total unemployment rate		0.06***	0.07***	0.07***	0.06***		0.05**	0.05**	0.05**	0.05**
Age divide (youth unemp - total unemp)		-0.05***	-0.05***	-0.05***	-0.05***		-0.05***	-0.05***	-0.04**	-0.04***
GDP pro capita		-0.08***	-0.07**	-0.08***	-0.08***		-0.06**	-0.05*	-0.05*	-0.06**
% Temporary employment		-0.02*	-0.01	-0.02*	-0.02*		-0.01	-0.01	-0.01	-0.02
EPL regular		-0.04	0.01		-0.04		-0.08	-0.01		-0.08
Epl-Gap		0.06	0.03		0.07		0.01	-0.05		0
Unions strength		-0.07**		-0.09*	-0.11**		-0.11***		-0.11***	-0.13***
Shift to permanent (ref. No)	**0.22*** **	**0.20*** **	**0.20** **	**0.08**	**0.08**	**-0.20*** **	**-0.22*** **	**-0.25*** **	**-0.30*** **	**-0.33*** **
Interaction Macro*Shift to permanent										
Epl-Gap*Shift to permanent			**0.00**		**-0.01**			**0.02**		**0.02**
Unions strenght*Shift to permanent				**0.04** **	**0.05** **				**0.03**	**0.03**
Constant	-0.74***	0.66	0.17	0.7	0.77	-0.22	1.40**	0.67	0.84	1.47**
Observations	13,833	13,833	13,833	13,833	13,833	13,833	13,833	13,833	13,833	13,833
Macro Area FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES

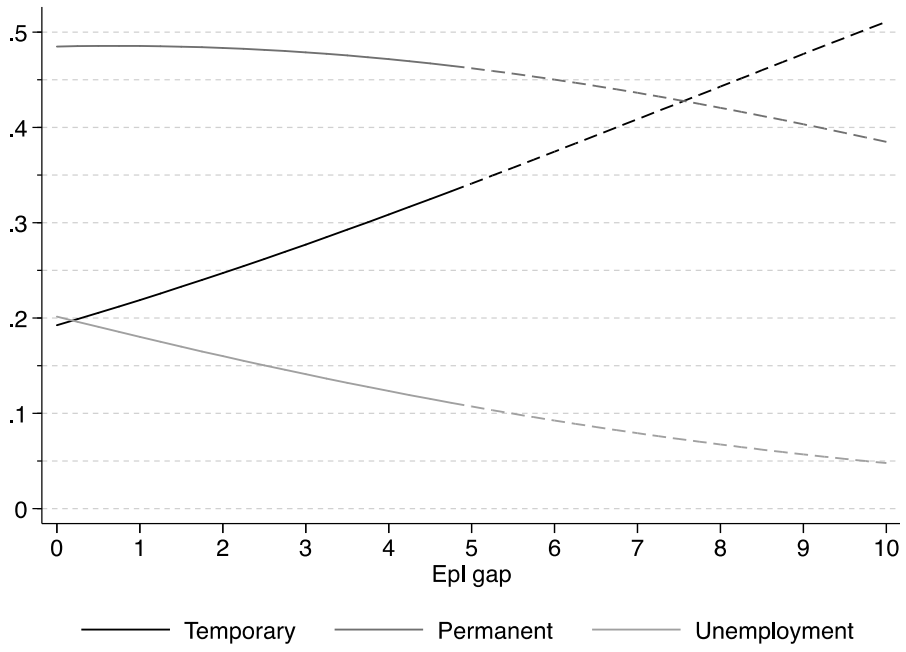
Significance levels *** p<0.01, ** p<0.05, * p<0.1 (clustered standard errors)

3.6 Discussion and conclusions

This chapter examined the early career stages of flexible labour market entrants in a context of institutional variety. In particular, I focused on two institutional dimensions of labour market segmentation – the EPL gap and union strength – as determinants of contractual and occupational mobility after a fixed-term entry. The topic received great attention in the last two decades, as the share of fixed-term employment has generally increased among young people, and the occupational trajectories of those who enter the labour market in a flexible position are not well explored in comparative perspective.

The empirical findings provide some insights on the *entrapment* hypothesis. More precisely, the chapter demonstrated that, once entered the labour market in FTCs, the probabilities of moving to different contractual and occupational positions on the external labour market largely depend on the actual level of insider-outsider segmentation. The higher this segmentation, the larger the likelihood to be 'entrapped' into the contractual and occupational position obtained immediately after school-leaving. Previous studies provide some theoretical support for this claim (e.g. McGinnity *et al.*, 2005; Scherer, 2004), but they lack in providing systematic empirical evidence (for an exception, see Barbieri and Cutuli, 2015).

I have shown how a disproportionate protection of permanent contracts compared to FTCs 'freezes' the early occupational careers after a fixed-term entry. In fact, in the context of a strong EPL gap, fixed-term entrants are more likely to remain in a fixed-term position rather than moving to permanent employment or to unemployment compared to a context where the EPL gap is low. In substantive terms, the probabilities of remaining in a fixed-term position increase of approximately 14 percentage points moving from contexts with no EPL gap (0) to contexts where the EPL gap has the maximum value (4.68) observed in the data (see Figure 3.2). However, the gap in the protection of permanent and temporary employment does not account for any influence on the likelihood of upgrading or downgrading in terms of socio-economic status. Conversely, the strength of unions does not impact on the probability of contractual mobility, while slightly influencing the chance of obtaining a job with a different socio-



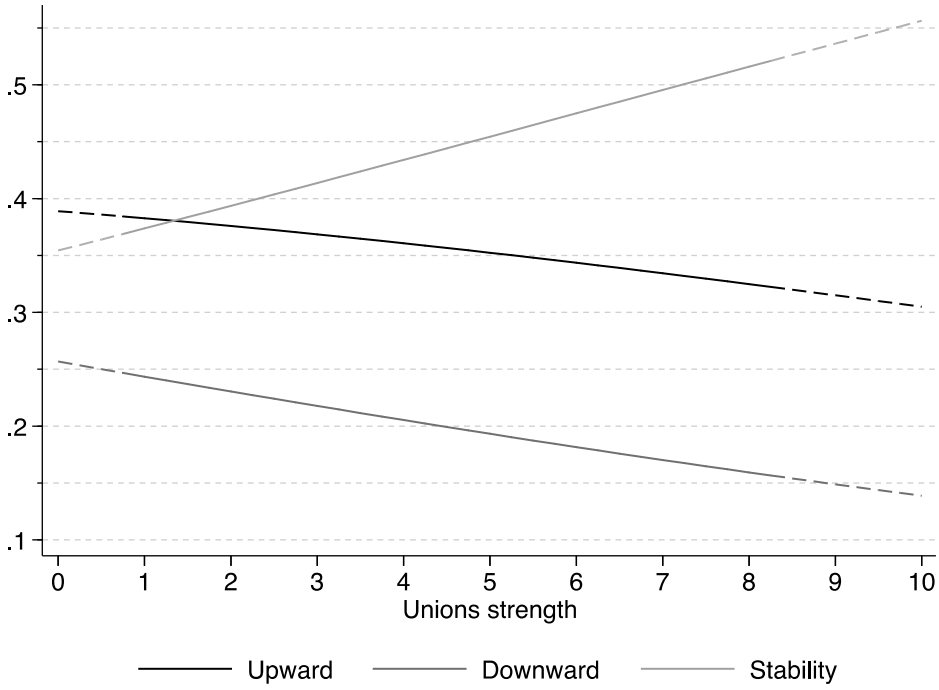
Source: Own elaboration based on the EU-LFS 2009

Figure 3.2 – Predicted probabilities and 95% confidence intervals (Table 3.2, model 5) of being in temporary contract, permanent contract, or unemployment after a flexible entry for different levels of Epl gap (dashed parts indicate extrapolation)

economic status compared to the first one. More precisely, moving from the minimum (0.75) to the maximum (8.31) observed value of union strength, the probabilities of moving upward and downward on the occupational scale decrease of approximately 6.5 and 9 percentage points, respectively (see Figure 3.3).

Moreover, I tried to relate the process of contractual and occupational mobility in a single framework. The analyses provided evidence that contractual and occupational upgrading after a flexible entry is likely to come together. However, a shift to permanent employment after a fixed-term entry more often leads to upward mobility in segmented rather than non-segmented labour markets, at least when segmentation in terms of union strength is concerned. As Figure 3.4 shows, in contexts where union strength is at the minimum observed value (0.75), shifting to a permanent contract after a fixed-term entry increases the probability of upward mobility of 5 percentage points approximately, whereas in contexts where union strength is at the maximum observed value (8.31), this increase is up to 10 percentage points. This is understandable, since in

contexts where strong unionism increases barriers across labour market segments permanent contracts are often overrepresented among high-status jobs.



Source: Own elaboration based on the EU-LFS 2009

Figure 3.3 – Predicted probabilities and 95% confidence intervals (Table 3.3, model 5) of moving upward, downward, or remaining stable on the occupational scale for different level of Union strength (dashed parts indicate extrapolation)

All in all, these results underscore the importance of distinguishing different aspects of the insider-outsider segmentation on the labour market, both theoretically and empirically. Indeed, when focusing on two institutional dimensions of the segmentation by type of contract – the EPL gap and union strength – there is evidence that the two dimensions do not equally impact on the outcomes considered, and that they exert separate, specific, and independent effects. This result, although not perfectly in line with the hypotheses, is understandable if we consider that the mechanisms by which we predicted similar effects differ considerably between the two institutional dimensions of segmentation.

The obtained results may have a wider relevance for scholars and policy makers. On the first point, the chapter contributes to the long-lasting debate about the possible

detrimental occupational consequences of flexible employment in the beginning of the career. In fact, I demonstrated in this chapter that the extent to which fixed-term contracts at the entry influence future career advancement on the external labour market depends on the actual level of institutionally driven segmentation. More specifically, this finding could contribute to explain why previous studies analysing the consequences of temporary employment at labour market entry found mixed results when focusing on different countries and periods, often marked by very different institutional arrangements.

Source: Own elaboration based on the EU-LFS 2009

Figure 3.4 – Predicted probabilities and 95% confidence intervals (Table 3.4, model 5) of moving upward on the occupational scale comparing subjects who shifted to permanent contracts and subjects who remained in temporary contract for different levels of Union strength (dashed parts indicate extrapolation)

The relevance for policy makers lies in the chance to modify the current institutional settings in order to boost the efficiency of labour markets. In fact, a more balanced protection of permanent and temporary contracts and less union strength seem to increase the mobility across labour market segments (both in terms of contract type and occupation), and – by this way – could improve the efficiency of the job-allocation

process in the early career. However, while more balanced employment protection legislation could represent a viable policy leverage to boost efficiency, the degree of unionisation cannot be considered as a specific target for public policy. Indeed, union membership often reflects the democratic nature of the bargaining structures in Western countries. Therefore – as far as efficiency is the primary goal of policy makers – the results suggest, that in strongly unionised contexts, an adequate combination of policies and institutional arrangements should promote adequate initial skill-job matches, since in these contexts any initial mismatch seems hardly adjustable afterwards.

Finally, it is important to discuss four possible limitations of this chapter and suggestions for future research. First of all – although offering some insights on the contextual determinants of *entrapment* dynamics – the research design does not allow us to draw any specific conclusions about the integrative potential of FTCs on the internal labour market. In fact, data limitations prevented the examination of contextual variations in the functioning of FTCs as extended probation periods, possibly followed by permanent contracts with the same employers. Conditionally on the availability of better cross-country data at the individual level, future research would benefit from examining jointly the contextual determinants of the *stepping-stone* and the *entrapment* scenarios.

A second point concerns the cross-sectional nature of the data used in this chapter, which prevented the analysis of multiple moves after the first, flexible labour market entry. As recalled in the very beginning of the thesis (see par 1.1, chapter 1), compared to earlier generations, occupational trajectories after the first labour market entry are currently more complex, and are often constituted by a mixed sequence of events that includes education, training, temporary employment, permanent employment, and unemployment spells. Unfortunately – given the focus on the role of contextual characteristics – these issues are hardly manageable due to unavailability of comparable full employment-history data for a wide set of countries.

Third, future research would benefit from considering possible heterogeneities in the effects of institutionally driven segmentation for the career progression of fixed-term entrants. For example, women could be particularly affected by strong unionism,

since they are traditionally underrepresented in work councils compared to men. Yet, strong unionism and unbalanced employment protection legislation could impact more strongly in sectors of employment where unions are more active and labour legislation more effective.

Fourth, the chapter analysed the role of unions at the national level. However, the degree of unions' centralisation is likely to differ cross-nationally. Cross-country variation in the extent to which unions bargain at the national, industry, or workplace level could have significant implications for the relation between union strength and the career progression after a flexible entry. While some degree of simplification in measuring concepts is unavoidable in empirical research, taking into account the cross-country variation in the levels at which unions bargain seems a promising area for future research on the topic.

CHAPTER 4

THE DIRECT EFFECT OF SOCIAL ORIGIN ON MEN'S OCCUPATIONAL ATTAINMENT IN THE EARLY LIFE COURSE: AN ITALIAN–DUTCH COMPARISON

Brief Summary

The chapter examines the direct effect (on top of education) of social origin on occupational attainment over the early life course of Italian and Dutch men in the period 1950–2005. Based on cross-country and cross-cohort comparisons, I explore the role of several contextual characteristics favouring the direct transmission of social advantages. Early employment careers are reconstructed using the 'Italian Longitudinal Household Panel Studies' (1997, 1999, 2001, 2003, 2005) and the 'Family Survey Dutch Population' (1998, 2000, 2003). Multilevel growth curve analyses are used to understand whether the direct effect of social origin at labour market entry increases, decreases or remains stable over the first 10 years of occupational career. Empirical results show that, in both countries, the direct social origin effect is rather stable over historical and biographical time. Independently of structural and institutional conditions influencing the extent of career mobility, offspring hailing from advantaged social background enjoys a better occupational position at labour market entry, while experiencing similar rates of career progression compared to their counterparts from less-advantaged families. However, when entering the labour market in the same occupational position, offspring from the service class enjoys higher rates of progression compared to their working class counterparts. Groups of mechanisms behind these patterns are discussed.

A version of this chapter is in preparation for journal submission

4.1 Introduction

A noteworthy result of intergenerational social mobility research is that social origin strongly influences occupational destinations, and that large part of this gross effect is mediated by educational attainment. However, several studies pointed out that social origin plays a role above and beyond what is mediated by education, and that the extent of this 'direct' effect varies cross-nationally (Ballarino and Bernardi, 2016; Breen and Luijkx, 2004). Relatedly, it is widely advocated – and sometimes unduly assumed (Goldthorpe and Bukodi, 2011) – that the direct effect of social origin has weakened over historical time, and that educational credentials have become increasingly important for successful occupational careers compared to the direct influence of social origin.

The alleged secular decline in the importance of the direct effect of social origin on occupational destinations is likely responsible for the less attention given to this issue in favour of the study of inequality of educational opportunities and the study of returns to educational qualifications in comparative perspective. However, the association between social origin and occupational destinations among people with the same level of schooling possibly represents the most undisputable form of inequality, and evidence regarding the secular tendency towards its decline is still scant (Goldthorpe and Bukodi, 2011). Indeed, even assuming that the process of educational attainment is completely meritocratic, the existence of disparities in the occupational destinations of people with the same schooling but different social origin strongly challenge the idea of education as a means to equalize people lives (Ballarino and Bernardi, 2016).

Comparative intergenerational social mobility research typically focused on social inequality, looking cross-sectionally at limited time points in the biography of individuals – being the first occupation, the occupation at a certain age, or the occupation at later stages of the career (e.g. Blau and Duncan, 1967; Breen, 2004; Erikson and Goldthorpe 1992). While this research paid great attention to how the first job mediates the overall relation between social origin and occupational destination, the role of career mobility has often been downplayed, not least due to unavailability of comparable life history data.

However, while interesting *per se*, early career mobility might have also important implications for intergenerational reproduction of inequality, as argued by relatively recent developments in the literature (Barone and Schizzerotto, 2011; Manzoni *et al*., 2014; Hillmert, 2015). Uneven occupational paths from the first job onwards could indeed strengthen or mitigate social inequality at labour market entry, and, therefore, career mobility is important for the evaluation of the overall process of social stratification in a given society (*ibidem*).

When focusing on the direct influence of social origin on occupational attainment, 'bringing in' the role of early career mobility allows the examination of the evolution of initial disparities (on top of education) over the early life course. As argued in the first chapter of this thesis, this gives the opportunity to analyse whether parents play a direct role in their children's occupational attainment at labour market entry, and whether this effect persists, vanishes or increases beyond that point. In fact, the direct influence of social origin on occupational attainment not only depends on social inequality at the career onset, but also on the capacity of parents to influence their offspring's rates of career progression.

This chapter examines this issue looking at early careers (i.e. the first 10 years since labour market entry) of men who entered employment in the period 1950–95 in Italy and the Netherlands. Although women would be equally interesting, there are reasons to believe that mechanisms of inter- and intragenerational social mobility work differently by gender.[46] Therefore, women deserve specific theoretical consideration and analyses, and would be a nice target for a separate chapter.

While differing considerably in their economic and occupational structure, both countries traditionally belong to the conservative welfare regime, and – until the early 80's – they were characterised by rigid labour markets and employment-related welfare entitlements (Esping-Andersen, 1990). However, the institutional settings of the two countries started to diverge considerably in response to the overcoming of the fordist

[46] Moreover, severe problems of selection into employment across the two countries and especially across cohorts would severely undermine the interpretability of the findings.

model in the early 80's. A widespread process of labour market flexibilization, the rise of an activating welfare, a different role of the industrial relation system, and – as suggested by the literature (Muffels and Luijkx, 2008) – some progress in favour of a flexicurity model, made the institutional context of the Netherlands more and more diverging from the immobile and traditional Italian one.

For these reasons, by comparing Italy and the Netherlands over the last half of the 20th century, the chapter offers fruitful insights on the role of contextual characteristics impacting career mobility, and their importance for the direct influence of social origin on an individual's occupational attainment. As discussed in the introduction chapter of the thesis (see par. 1.3 and 1.4), several institutional characteristics may indeed foster or hamper the individuals' chances of career mobility, thus impacting on the labour market capacity to modify the stratification usually observed at labour market entry. In this way, the chapter builds on previous literature that integrates inter- and intragenerational mobility perspectives by focusing specifically on the direct effect of social origin, and by exploring the role of institutional and historical contexts.

Apart from the substantive interest in the intragenerational evolution of the direct social origin effect, this strategy overcomes some potential shortcomings of previous research on this topic. If social origin directly influences patterns of career growth, then comparisons among studies focusing on 'snapshots' of inequality at different career points could lead to biased substantive conclusions about societal variations and historical trends in the importance of the direct social origin effect. Moreover, if intragenerational evolutions of the direct social origin effect differ systematically across countries and periods, even comparative studies based on inequalities observed at the same points in the individuals' life courses could be misleading.

In the first part of the theoretical section of this chapter, I outline several mechanisms underlying the existence of the direct effect of social origin on occupational destinations, some reasons behind the supposed historical decline of this direct effect in Western countries, and core previous findings regarding the Italian and the Dutch context. In the second part, I introduce the importance of career mobility for the evolution of the direct social origin effect over the early life course. The theoretical

section concludes by presenting the Italian and the Dutch context and by outlining specific hypotheses. Then, sections reporting details on data, variables and methods, discussion of the empirical results, and conclusions will follow.

4.2 Theoretical framework

4.2.1 The direct effect of social origin across countries and historical time: mechanisms and previous findings

The existing literature pointed out several mechanisms trough which social origin might have a direct influence on occupational destinations (Ballarino and Bernardi, 2016; Erikson and Jonsson, 1998; Hallsten, 2013). The most obvious lies in social capital and similar micro-level relational resources (Barbieri, 1997; Granovetter, 1973; Lin, 1999). Indeed, offspring from high parental background benefit from personal contacts and social relationships that may be more valuable on the labour market compared to social resources offered by worse-off families. Moreover, independently on educational attainment, pupils from better-off families may develop better non-cognitive skills – or soft skills – that are highly rewarded by employers, such as self-confidence, social *savoir-faire*, perseverance, conscientiousness and extraversion (Bowles and Gintis, 1976; Brunello and Schlotter, 2011; Heckman *et al*., 2006). In this scenario, it may simply be the case that statistical discrimination plays a role: employers discriminate people with a low social background, because they are "unfit" for the specific characteristics of the "post-fordist" production, and therefore less productive. The same discrimination, however, may be found even when there are no clear-cut efficiency reasons at its basis (Becker, 1971; Sørensen, 2005). Of course, offspring from advantaged families may be more sensitive to occupational success and strive for their occupational status, also irrespectively of their school level, i.e. they may be socialised at home to higher aspirations. Last, the direct inheritance of family business and other material as well as immaterial resources strictly connected to working activities – such as plants, pieces of machinery, or pools of costumers – may be at the basis of a direct intergenerational reproduction of social advantages.

With regard to the evolution of the direct influence of social origin over historical time, several arguments support the expectation of a secular decline. First of all, modernization theories (Bell, 1973; Blau and Duncan, 1967; Treiman, 1970) postulate that increasing market competition induces employers to avoid inefficient person-job allocations possibly leading to market failures, thus increasingly forcing them to rely on meritocratic criteria in the hiring procedure. Therefore, modernization over historical time should be associated with decreasing importance of the direct influence of social origin and increasing importance of educational qualifications for occupational attainment. Second, the size of those occupational sectors more prone to the direct inheritance of material resources, such as the agricultural sector, craftsmanship and family-business in general, has decreased during the 20th century. This leaves less room for the inheritance of the family business and therefore direct intergenerational transmission of the social status. Third, it has been argued that modernization has occurred also on the cultural ground: meritocratic principles have widespread among employers not only to avoid market failure, but also in compliance with a general shift from particularistic to universalistic values in Western countries (Parsons, 1951; West, 1973).

Despite these considerations, empirical evidence on the existence of a direct effect of social origin on occupational attainment and a secular trend toward a decline in the importance of this direct effect is mixed and often contested (e.g. Breen and Luijkx, 2004; Goldthorpe, 2001; Warren *et al*., 2002). A recent book edited by Ballarino and Bernardi (2016) consistently finds evidence of a substantial direct effect of social origin on the occupational status of the first and current job in all European countries analysed (14 in total), Italy and the Netherlands included. Interestingly, the direct social origin effect is somewhat stronger in the former than the latter country. However, while in Italy and in the vast majority of other national contexts the direct effect of origin on occupational attainment is rather stable over historical time, in the Netherlands a decreasing trend is found (see Tolsma and Wolbers, 2016).

Regarding Italy, these results are in line with previous studies that always found a substantial and persistent direct effect of social origin on occupational destinations over

historical time, independently of how parental background is measured and the career point in which occupational attainment is observed (Barone *et al.,* 2011; Barone and Guetto, 2016; Schizzerotto, 2001). Conversely, previous findings from the Netherlands are far from being unanimous. On the one hand, some studies questioned whether there is a direct effect of social origin at all in the Dutch context. For example, van de Werfhorst (2002) found no direct effect of origin class to destination class for men aged 25–65. On the other hand, studies that find evidence of a direct social origin effect report either declining importance or persistency over historical time. When focusing on origin class to destination class at age 35, Ganzeboom and Luijkx (2004) found both a substantial direct effect and a trend towards declining importance in the period 1970–1999. This result confirms previous findings from De Graaf and Kalmijn (2001) for the cohorts who entered the labour market in the period 1923–1984. Conversely, focusing on the cohorts entering the labour market between the 1950s and the 1970s, Wolbers and colleagues (2011) found historical persistency in the direct influence of fathers' occupation on sons' occupation measured at first labour market entry, and ten and twenty years (of working experience) afterwards. In the same vein, Tolsma and Wolbers (2010a, 2010b) found no decline when looking at the direct effect of social origin on the first and the current (or last) job, respectively. Conversely, the same authors find some signs of declining direct intergenerational transmission of occupational status looking at the birth cohorts 1931–80 (Tolsma and Wolbers, 2014).

Most of these studies examined the direct influence of social origin looking at a 'snapshot' of an individual's occupational career or limited career points at best (for an exception, see Barone and colleagues, 2011). As recalled in the introduction, this cross-sectional view of intergenerational social mobility may lead to misleading results if social origin directly influences the chances of career growth. Career mobility – occurring typically in the first years of labour market experience – is therefore important for a proper evaluation of the direct influence of the family of origin on offspring's occupational success.

4.2.2 Career mobility and the evolution of the 'direct effect' in the early life course

Career mobility pertains to movements of individuals across the occupational structure during their life course. These movements occur both along the vertical and the horizontal dimensions of the occupational structure, and usually concentrate in the early work life stages (Rosenfeld, 1992). Previous literature has shown that men's careers often involve early upward moves on the occupational ladder until a steady state is reached, usually around their thirties (Barone and Schizzerotto, 2011). A possible explanation of this pattern is that over-skilling at labour market entry is often adjusted during the early career: when a match is found, further career mobility is scant (Sicherman and Galor, 1990). Although the adequacy of this explanation depends on the institutional contexts and in particular on the labour market fluidity and the efficiency of the job-matching process (which affect the extent of over-skilling at labour market entry), other explanations seem to confirm this pattern. Indeed, the marginal value of specific human capital acquired on the job decrease with seniority, and promotions on the internal labour market usually concentrate among younger employees (Mincer, 1974; Kerckhoff, 1995; Marsden and Ryan, 1995).

However, other micro-level dynamics might influence the patterns of career growth. Abilities and motivation do play a role in increasing the chances of reaching the top of occupational hierarchies even when starting from the bottom, and high levels of education could be associated with high rates of career growth when starting in non-adequate job positions, or with low rates of progression when starting at the top. Indeed, the Blau-Duncan model of occupational status attainment (Blau and Duncan, 1967) already stressed the role of ceiling effects: when starting at the top of the occupational hierarchy, the chances of further ascendance are reduced since there is un upper-limit to occupational progression (see also Sørensen, 1975).

Social origin could also play a relevant role (above and beyond what is mediated by education). Compared to offspring from the working class – and level of education being equal – offspring hailing from the upper classes may not only differ in the first placement on the occupational hierarchy, but also in the shape of career progression.

Different patterns of career growth, in turn, account for the evolution of the initial penalty/advantage over the early work career. The direct effect of social origin could either vanish after first labour market entry, or persist (and even increase).

A reduction of the effect of social origin may be expected to the extent that initial penalties are based on non-meritocratic criteria and upgrading on the occupational ladder is indeed meritocratic: in this scenario, initial mismatches would indeed disappear once employers observe the 'real' productivity of employees at the workplace. Moreover, as young workers move away from first labour market entry, their resources and social networks would increasingly depend on their own job experience rather than on their families of origin (Mare, 1980). A third reason to expect a reduction of the direct effect of social origin lies in the role of ceiling effects: if pupils hailing from the upper classes enjoy better placement at labour market entry, possibly at the top of the occupational hierarchy, then their chances for further improvements are severely constrained. In this scenario, young people from less-advantaged families might have the chance to catch up.

The opposite scenario is however possible. To begin with, the literature underlined how small penalties in the beginning of the career could indeed mirror in bigger penalties over the life course due to a process of cumulative disadvantage (DiPrete and Eirich, 2006). Furthermore, upgrading on the internal labour market could be indeed governed by non-meritocratic and non-efficient principles (see Wolbers *et al*., 2011, p. 430), thus leaving room for the direct influence of parental resources on offspring's career progression. This latter scenario is even reinforced if we consider that offspring from upper classes are often not able to reproduce the status of their parents immediately at labour market entry, and they are therefore 'forced', or 'helped', to grow until this stage is reached (Härkönen and Bihagen, 2011; Hillmert, 2011). In this 'counter-mobility' perspective (Goldthorpe *et al*., 1987), higher aspirations, better soft skills and better social contacts of offspring from advantaged families might indeed have more importance at later career points than at labour market entry. For example, social contacts and inherited material resources may become useful to come up the hard way after an initial period at the bottom of the occupational hierarchy. Yet, returns to

soft skills are more likely to take place after a period on the labour market, since their beneficial effects should result from fruitful every-day interactions with employers and colleagues.

4.2.3 The role of the context: Italy and the Netherlands compared

Italy and the Netherlands differ considerably in their economic and institutional structures. The Italian productive structure is largely based on small firms, usually in the form of family business inherited from one generation to the next. Consistently, non-formal channels of recruitments – such as strong ties with parents, family, and friends – were and are still the most frequent and efficient way to find a job in the Italian context (Barbieri, 1997; Reyneri, 2005). In addition, corporatism among liberal professions is traditionally pronounced in Italy, and consequently both legal and less-formal restrictions keep the access to professional occupations non-transparent and subject to direct inheritance (Barone *et al*., 2011).

Although the Netherlands has never been the classic industrial country (Visser and Hemerijck, 1997), Dutch economy was dominated by large multinational enterprises until the 1970s (van Zanden, 2005). Subsequently, their importance has declined in favour of smaller firms in the service sector and in favour of public employment (*ibidem*). Consistently, the chance of social origin to influence hiring procedures and the chance of direct inheritance of family businesses might have been limited by the formal and standardised channels of recruitments, typical of large firms and the public sector (van de Werfhorst, 2011).

Structural and institutional characteristics also contribute to the extent of early career mobility in the two countries. As anticipated in the first chapter of the thesis (see par. 1.3.1), in occupational labour markets, the educational system provides students with highly standardized and reliable vocational qualifications that are directly useful to perform specific occupations (Doeringer and Piore, 1985; Maurice *et al*., 1986). In these contexts, early career mobility is reduced, since skill-job matches are usually reached around labour market entry (Gangl, 2003a; Shavit and Muller, 1998). In internal labour

markets (*ibidem*), the education system provides more general qualifications, while more specific competencies are provided directly by firms. In these contexts, substantial career advancements usually take place within firms as seniority increases. However, internal labour markets require large firms, where newcomers are trained on the job and subsequent career advancements are regulated by formal, standardised, and bureaucratic procedures (Kalleberg and van Bueren, 1996; Weber, 1922). Conversely, in contexts with an economic structure governed by small and medium firms, internal career ladders are 'structurally' constrained (Kalleberg and Mastekaasa, 1998; Barbieri and Bison, 2004). This is especially true when small firms coincide with family businesses, where meritocratic principles of career advancements are subordinated to direct inheritance.

Compared to Italy, the Netherlands can be considered an occupational labour market. However, vocational qualifications are not a formal prerequisite to enter specific occupations to the same extent as in other countries, such as Germany. In fact, the Netherlands is often considered a country with 'intermediate' occupational boundaries (de Graaf and Ultee, 1998; Shavit and Muller, 1998). Moreover, until the 1970s, the Dutch economy strongly relied on large enterprises offering substantial training on the job and large opportunities for advancements on internal career ladders.

Italy does not fit perfectly either in the occupational or the internal labour market category (Gangl, 2003a; Muller, 2005). On the one hand, the Italian educational system is academically oriented and offers very general competencies (Triventi and Trivellato, 2009; Passaretta and Triventi, 2015). On the other hand, small firms characterising the Italian productive structure offer very limited internal career ladders and, if anything, very limited training on the job (Reyneri, 2005). Moreover, an uneven path of modernisation confined Italian southern regions to an agricultural economy that has been largely subsidised by the State until the beginning of the 1970s, when a process of internal migration moved hundreds of thousands of young, unqualified, males to enter the fordist economy in the northern part of the country. None the less, a non-negligible proportion of young farmers managed to spend their entire career in agricultural

occupations with no or very limited chances of occupational progression even in a context of rapid industrialisation (Barbieri, 2011; Barone *et al*., 2011).

Notwithstanding these general differences affecting the levels of career mobility, the institutional contexts of the two countries were more similar in the past than in recent years. Until the 1980s, both countries were characterised by strict labour market regulation, strong control over professional occupations and settlement of new businesses, as well as employment-related welfare entitlements (Esping-Andersen, 1990). These rigidities contributed to keep relatively low the extent of workforce mobility. In fact, strict protection of employment relationships and strong state regulations over investment, entrepreneurship and professional activities generally decrease the number of vacancies and turnover levels, thus fostering job stability (Bertola and Rogerson, 1997; Gangl, 2003b; Amable and Gatti, 2004; Nicoletti and Scarpetta, 2005).

However, the institutional settings of the two countries started to diverge considerably with the crisis of the fordist model in the early 1980s. On the one hand, the Netherlands reacted to the rising unemployment rates by largely flexibilising labour and products markets, thus favouring job-creation, lowering job-tenure, and considerably increasing workforce turnover (Visser and Hemerijck, 1997). These measures were also complemented by more universalistic welfare entitlements, such that nowadays some authors suggest including the Netherlands in the 'flexicurity' model typical of the Scandinavian countries (Muffels and Luijkx, 2008). In this respect, crucial was the social responsibility of trade unions. In fact, trade unions supported – or at least tolerated – unpopular policy measures aimed at fostering job-growth, among which a process of wage-moderation that allowed shifting economic resources from 'passive' to 'active' labour market policies (Visser and Hemerijck, 1997). These institutional changes led to more competitive labour markets without fostering segmentation between permanent and temporary workers, thus favouring opportunities for career advancement particularly for the youngsters.

Conversely, the Italian reaction to the crisis of the fordist arrangement was institutional inertia until the mid-1990s. Flexibility was introduced as a partial and

controlled experiment only afterwards and was not accompanied by universalistic welfare measures, thus failing in fostering job-creation and turnover levels (Esping-Andersen and Regini, 2000; Regini, 2000). Crucial in this respect was the role of trade unions, which employed their veto-power to defend standard employment as the bulk of social security and prevented institutional reforms in the economic domain.

4.2.4 Hypotheses

I now develop specific expectations about i) the relative importance of the direct effect of social origin on occupational attainment in the two countries; ii) the extent of early career mobility across countries and historical periods; and iii) the consequences of early career mobility for the evolution of the direct effect of social origin over the early life course across countries and cohorts.

As suggested in the previous section, in Italy, the prevalence of small and medium firms, the relevance of non-formals channels of recruitment, and the strong corporatism of liberal professions favoured the direct inheritance of family business and left large room for a direct influence of social origin on occupational destinations. Conversely, in the Netherlands, the standardized and formal recruitment processes typical of large firms and public employment put severe constraints to a direct influence of social origin. Hence, I generally expect a stronger direct effect of social origin on occupational attainment in Italy compared to the Netherlands (*Hypothesis 1*).

The chapter also discussed how structural and institutional characteristics in the two countries may have affected the extent of early career mobility along the last half of the 20th century. Strong rigidities in the economic domains kept relatively low the extent of career mobility until the early 80's in both countries. However, the prevalence of small firms offering no or very little opportunities for career advancement kept lower the extent of early career mobility in Italy compared to the Netherlands, where the economic structure based on larger firms and public employment counterbalanced the 'intermediate' occupational boundaries typical of the Dutch system. However, in the beginning of the 80's, a process of market deregulation in reaction to the crises of the

fordist model found weak opposition from Dutch trade unions, and resolved in increasing workforce mobility nad greater opportunity for career advancement for young people. Conversely, the Italian reaction to the economic crises was institutional inertia.

Based on structural institutional differences between the two countries, I expect the levels of career mobility being generally lower in Italy compared to the Netherlands and that this gap has even increased after the institutional reforms occurred in the Dutch context during the early 1980s (*Hypothesis 2*). In fact, in the Netherlands, early career mobility (and especially upward mobility) should have increased for men entered the labour market after institutional reforms occurred in the early 1980s compared to earlier cohorts. Conversely, in Italy, the low levels of career mobility of young men should have remained largely unchanged over historical time.

Finally, I also discussed how early career mobility could strengthen or weaken the direct effect of social origin on occupational attainment at labour market entry (see par. 4.2.2). However, many of the dynamics underlying the compensation and the accumulation scenarios are plausibly at work at the same time. The evolution of the direct social origin effect in the early career is therefore the result of contrasting mechanisms, possibly resolving in intragenerational stability. In principle, this applies to both the Italian and the Dutch contexts, even though different opportunities for career mobility in the two countries lead to more nuanced expectations.

In Italy, although parents may want to help their offspring beyond the first job search, this willingness should be severely constrained by institutional and structural characteristics that limit early career mobility for all social groups – in all historical periods considered. For the same reasons, offspring from less-advantaged families should have few chances to compensate the initial disadvantage with steeper career growth. Therefore, in the Italian context, I expect strong initial disparities to remain quite stable over the early career for all labour market entry cohorts analysed (*Hypothesis 3*). In fact, in Italy, high restrictions to early career mobility make plausible that a great part of the intragenerational stability of the direct effect of social origin is

the genuine result of limited chances of career progression for all social groups, rather than the results of contrasting mechanisms.

Conversely, in the Netherlands, institutional and structural constraints to career mobility are traditionally lower than in Italy, and this should reflect in higher chances for the direct effect of social origin to vary over the early life course. Given structural and institutional characteristics increasing the overall level of career mobility in the Netherlands, I hypothesise an accumulation scenario to be at the stake. Even if better initial placements of youngsters hailing from upper classes account for lower progression afterwards (ceiling effects) and that meritocratic principles regulating career advancements tend to dissolve initial inequalities, I believe that counter-mobility processes are likely to offset these mechanisms of intragenerational compensation. Indeed, in the Dutch context, offspring from upper classes do not necessarily need to reproduce the status of their parents immediately at labour market entry. Here, low restrictions to career mobility allow them to accept first jobs that score below their expectations – although not "bad jobs" – only because those jobs are expected to be transient, and further progression on the occupational ladder are expected afterwards. These counter-mobility processes should even be more likely after labour market policies occurred in the early 1980s, which removed some of the institutional restrictions on career mobility. For these reasons, in the Netherlands, I expect the direct effect of social origin to increase over the early career, and even more so for young men entered the labour market after the 1980s (*Hypothesis 4*).

Compared to previous literature, the chapter proposes some advancement in disentangling the role of the contrasting mechanisms at the basis of the intragenerational evolution of the direct effects of social origin. In this respect, I split the overall direct effect of social origin on the rate of career progression into two components: a) the influence of social origin on the rate of career growth that is mediated by the first job placement (that itself influences further chances of progression); b) the influence of social origin on the rate of career growth beyond the first job placement (i.e. the 'true' direct effect of origin on the rate of career progression). In doing so, the chapter questions whether social origin directly determines occupational attainment above and

beyond what is mediated by the first job placement (and education), and whether the intragenerational evolution of the direct social origin effect is indeed the results of contrasting mechanisms operating at the same time.

4.3 Data, variables and methods

4.3.1 Data and variables

The data used for the empirical analyses are from five waves of the 'Italian Longitudinal Household Panel Studies' (ILFI, 1997, 1999, 2001, 2003, 2005) and three waves of the 'Family Survey Dutch Population' (FSDP, 1998, 2000, 2003). Both datasets collected life course information on nationally representative samples of the population, thus allowing for the reconstruction of full employment careers. I restricted our analyses only to men who started their career by the age of 35 and after WWII in both countries.

Based on these data, I built two person-month datasets where information on the occupational positions held by men are observed in each month after the first labour market entry up to 10 years afterwards (with no gaps). Career duration refers to the time since the first 'real' labour market entry, i.e. the first job of at least three months obtained after the attainment of the highest level of education. The occupational position in each month-spell is measured by the International Socio-Economic Index (ISEI) of occupational status elaborated by Ganzeboom and Treiman (1996) on the basis of the ISCO88 occupational categories. Episodes of unemployment and inactivity are dropped from the sample. After list-wise deletion of missing cases on all relevant variables, the overall sample includes 434,980 and 315,912 person-months observations for 3,261 and 2,374 Italian and Dutch men, respectively.

The chapter focuses on the early work histories of three broad labour market entry cohorts: 1950–65, 1966–80, and 1981–95. Individuals who entered the labour market after 1995 are not included, since the observation window for their early work histories would be too narrow. Although it is possible that some individuals left the labour market prior to 10 years after first entry, the analyses are almost entirely based on

observed early careers: on average, individuals from each entry cohort in both countries are observed for a period of 9–10 years. I distinguished broad entry cohorts since the sample size in each country is modest, and therefore more detailed classifications would significantly decrease the reliability of the empirical analyses. Early careers of the first cohort almost entirely developed during the economic boom after WWII (1950-1975); the second cohort experienced both the economic downturn at the turn of the 1970s and – in the case of the Netherlands – the first years after important labour market reforms (1966–1990); the last cohort developed the early career starting from the 1980s onwards, i.e. during a period of institutional inertia in Italy and entirely after labour market reforms occurred in the Netherlands (1981–2005).

Social origin is measured as the highest social class between those of fathers and mothers when respondents were 15 years of age. I use a parsimonious three categories version of the EGP class scheme (Erikson and Goldthorpe, 1992) that distinguishes: a) the service class (I, II); b) the self-employed, white collars, and high-level technicians (III, IV); and finally the working class (V, VI, VII). This parsimonious threefold classification entails a clear and comparable hierarchy.

Respondents' highest level of education is measured as a time-fixed variable. In both countries, respondents with lower secondary education or less are included in the 'low' category, those with upper secondary education are included in the 'intermediate' category, and those with tertiary education in the 'high' category. Although the Dutch educational system traditionally has two large vocational tracks (at the level of upper secondary education and at the level of tertiary education, non-university colleges), I adopted this three-fold classification for two reasons. First, including a different number of predictors in the models for the Netherlands and Italy would severely undermine the comparability of our results. Second, increasing the number of predictors would results in excessive extrapolation in the statistical model, since sample sizes within detailed educational categories would be too narrow. A straightforward consequence of this decision is that – given social inequalities in the access to vocational versus general education and heterogeneities in the occupational returns to those qualifications (Shavit

and Müller, 1998) – the direct effect of social origin on occupational attainment in the Netherlands might be slightly inflated in our empirical models.[47]

4.3.2 Methods

The analyses are performed *via* growth curves modelling (Halaby, 2003). While belonging to the broader family of hierarchical models, these models account multiple time-observations (level-1) nested within individuals (level-2) – in our case, monthly observations of ISEI scores along individuals' working careers. This strategy is particularly adequate in our contexts, since it allows the assessment of the role of time-invariant characteristics (such as parental social class and education) on both the 'average' occupational attainment, and the development of occupational status over the early life course.

A series of models with an increasing level of complexity are estimated separately in each country. Our basic model has the following general form:

$$y_{ij} = \beta_0 + \beta_1 car_{ij} + \beta_2 car_{ij}^2 + \beta_3 orig_j + \beta_4 educ_j + \beta_5 entrycohort_j + \left(u_{0j} + u_{1j} + \varepsilon_{ij}\right) \quad (1);$$

where the ISEI score at time *i* for individual *j* is regressed on a linear and a quadratic term for career duration, and three time-invariant predictors measuring social origin, the highest level of education attained, and labour market entry cohort. The random part of the equation (in brackets) includes a variance component for the intercept (μ_{0j}), a variance component for the slope of linear career duration (μ_{1j}), and a time-varying residual error term (ε_{ij}). In this setting, the 'average' career path and its variability across individuals is modelled. In fact, in this setting, each individual is allowed to have his own growth parameters (intercept and slope), i.e. an individual-specific ISEI at career start and an individual-specific rate of linear career progression.

[47] However, using a more detailed classification that distinguished vocational and general/academic education both at upper secondary and tertiary level in the Dutch context results in slightly lower, but equally statistically significant direct effect of social origin.

I start with a null model (M1) that decomposes the total variance in ISEI scores in its between- and within-individual components, where the latter quantity is a good overall measure of early career mobility occurring in each country (both upward and downward). Moreover, the intraclass correlation computed from the two quantities will inform us about the importance of overall differences between individuals relative to differences over time (career mobility) in explaining the total variance in the ISEI scores. Then, I add to the null model the variables measuring career duration both in linear and quadratic form, and the random slope for linear career duration (M2). This model will allow specific cross-country comparisons in the average ISEI at labour market entry and in the extent and shape of early careers progression. Moreover, the reduction of the within-variance components and the covariance between intercepts and slopes will inform us about the importance of career duration for occupational advancements, and the presence of ceiling effects. In the following two models (M3 and M4), I include social origin, labour market entry cohort, and level of education, in order to examine their impact on the 'average' occupational attainment over the early career, with a particular emphasis on the role of the direct effect of social origin. I then include interaction terms between labour market entry cohort and social origin, and labour market entry cohort and level of education, respectively (M5). This model will allow us to examine historical changes in the role of the direct effect of social origin and level of education for the 'average' occupational attainment in the early work life. Finally, the first part of the analyses concludes by inspecting whether the role of career duration for early occupational advancement differs over historical periods characterised by very different economic and institutional arrangements in each country (this is done by adding interactions between the linear and quadratic terms for career duration and labour market entry cohort, see M6).

In the second part of the analyses, I add to equation 1 the three-way interaction between social origin, labour market entry cohort, and the linear and quadratic term for career duration, on the one hand, and the three-way interaction between level of education, labour market entry cohort, and the linear term for career duration on the other. This model detects in each country and labour market entry cohort: a) the direct

effect of social origin on occupational attainment at labour market entry; and b) the direct effect of social origin on the rate of early career progression. In this specification, the lower order interaction terms between education and labour market entry cohort account for the (cohort-specific) portion of the total effect of social origin at labour market entry that is mediated by educational attainment. The higher order interaction terms between level of education, labour market entry cohort, and linear career duration account for the (cohort-specific) portion of the total effect of social origin on the pace of career progression that is mediated by rates of (linear) career growth typical of high-, intermediate-, and low-educated labour market entrants. In this way, we are able to understand whether in each country and cohort there is a direct social origins' penalty at the beginning of the career, and whether this direct initial penalty persists, increases, or vanishes during the early career.

In the third part of the analyses, I add to the previous model the ISEI of the first job interacted with linear career duration variable and labour market entry cohort. In this way, the 'overall' direct effect of social origin on the rate of career progression in each country and cohort is decomposed in a) an indirect effect through the first job placement, and b) a 'true' direct effect, the latter reflecting the importance of counter-mobility processes, social networks, soft skills, employers' discrimination, aspiration, and direct inheritance beyond what is mediated by quality of the first job entry.

In the second and the third part of the analyses, average marginal effects in graphical forms are presented, in order to allow for a straightforward interpretation of cross-country and cross-cohort differences.

4.4 Empirical results

4.4.1 The role of career progression, entry cohort, social origin, and education for occupational attainment

Table 4.1 shows the results of the growth-curve models where the ISEI score is regressed on a series of time-varying and time-invariant covariates in the two countries. In the null model (M1), the within-variance is remarkably higher in the Netherlands

(40) compared to Italy (14), thus suggesting a higher degree of early career mobility in the former than in the latter country. Moreover, the intraclass correlations that can be computed from the two random coefficients ([Within/(Within+Between)]) show a remarkable degree of permanence in occupational attainment in both countries, although great cross-country differences can be detected. The intraclass correlation in Italy shows that only the 7% of the total variation of men's ISEI scores is attributable to occupational mobility over the early career (both upward and downward) rather than differences between individuals, whereas in the Netherlands this share is substantially higher, around 17%. These results are in line with our expectations and previous research showing Italy as one of the countries with the lowest level of career mobility (Barone *et al*., 2011).[48]

M2 includes the linear and quadratic terms for career duration, and is used to explore the role of career duration for a men's occupational advancement. In line with *H2*, the estimated coefficients show that opportunities for career progression are more limited in Italy compared to the Netherlands. After 10 years on the labour market, the ISEI of Italian men are expected to increase on average by approximately 2 points ([0.307*10]–[0.009*100]), whereas the expected average increase for Dutch men is almost double, around 4 points ([0.565*10]–[0.017*100]). The negative quadratic terms for career duration show that each additional year of career increases occupational status at a decreasing rate: this result supports the existence of a 'maturation point' over individuals' work careers (Barone and Schizzerotto, 2011; Manzoni *et al*., 2014). Moreover, in both countries, the within-variance components are approximately halved compared to M1 (14.2 versus 6.7 and 40.7 versus 21.7), thus showing that around the 50% of the occupational mobility over time is explained by a curvilinear

[48] I found a lower level of occupational mobility compared to Barone and colleagues (2011), even if the analyses solely focus on the early career, i.e. the period when career mobility is usually higher. This difference is understandable, since I limited the analyses to men, who usually are characterised by a higher degree of occupational stability in countries where the 'male breadwinner model' is dominant.

Table 4.1 – Growth curve models for analysing ISEI scores: Focus on average career progression and on the role of social origins and education across entry cohorts (Italy: N individuals=3,153; N monthly-spells=354,524 – Netherlands: N individuals=2,340, N monthly-spells=264,060)

	ITALY						THE NETHERLANDS					
	M1	M2	M3	M4	M5	M6	M1	M2	M3	M4	M5	M6
Career duration		0.307***	0.307***	0.307***	0.307***	0.175***		0.565***	0.565***	0.565***	0.565***	0.336***
Career duration2		-0.009***	-0.009***	-0.009***	-0.009***	0.002*		-0.017***	-0.017***	-0.017***	-0.017***	-0.002
Entry Cohort (ref. 1950-1965)												
1966-1980			3.747***	0.159	-0.004	-0.476			2.774***	1.002*	0.335	-0.128
1981-1995			5.131***	-0.404	0.262	-0.023			3.091***	-0.138	-1.792	-2.937**
Social Origins (ref.V,VI,VII)												
Medium (III,IV)			3.842***	1.326***	-0.345	-0.345			3.093***	0.862	-0.048	-0.052
High (I,II)			16.291***	6.209***	6.200***	6.200***			10.105***	4.154***	4.969***	4.967***
Education (ref. <upper sec.)												
Upper secondary				11.341***	14.602***	14.603***				6.466***	6.240***	6.243***
Tertiary				32.523***	35.149***	35.150***				20.398***	18.493***	18.497***
*Interaction Social Origins*Cohort*												
Medium (III, IV)*1966-1980					2.416***	2.415***					1.946	1.949
Medium (III, IV)*1981-1995					2.184**	2.182**					0.708	0.709
High (I, II)*1966-1980					-0.474	-0.475					-0.609	-0.607
High (I, II)*1981-1995					0.277	0.272					-1.34	-1.344
*Interaction Education*Cohort*												
Upper secondary*1966-1980					-3.223***	-3.225***					-0.003	-0.006
Upper secondary*1981-1995					-5.020***	-5.021***					1.209	1.199
Tertiary*1966-1980					-3.879**	-3.880**					0.955	0.952
Tertiary*1981-1995					-3.241*	-3.245*					4.140***	4.126***
*Interaction Career*Cohort*												
Career duration*1966-1980						0.187***						0.186**
Career duration*1981-1995						0.190***						0.436***
*Interaction Career2*Cohort*												
Career duration2*1966-1980						-0.012***						-0.013***
Career duration2*1981-1995						-0.021***						-0.028***
Intercept	39.397	38.196	32.171	30.197	30.186	30.453	46.646	44.462	38.33	34.001	34.655	35.261
Variance Between (level 2)	192.273	210.291	186.233	103.468	102.064	102.041	206.992	247.185	227.289	171.416	170.881	170.776
Variance Within (level 1)	14.243	6.704	6.704	6.704	6.704	6.7	40.751	21.761	21.761	21.762	21.762	21.755
Variance slope (career dur)		0.99	0.99	0.988	0.988	0.987		2.429	2.427	2.417	2.416	2.41
Covariance intercept-slope		-4.121	-4.095	-4.147	-4.099	-4.094		-9.84	-9.908	-10.65	-10.659	-10.635

Significance levels: *** p<0.01, ** p<0.05, * p<0.1

trend of career progression. Finally, the negative covariance between the intercept and the slope of career duration shows the presence of 'ceiling effects' in both Italy and the Netherlands: the higher is the initial placement on the job market, the lower is the rate of career growth.

Adding the labour market entry cohort and social origin variable in M3, results in substantially decreased between-variance components in both countries: this means that differences in occupational attainment are largely explained by these two variables. The constant terms shows that immediately after WWII the average socio-economic position in Italy was sensibly lower compared to the Netherlands (approximately by 6 points on the ISEI scale [38–32]), whereas, starting from this baseline, coefficients of the labour market entry cohorts dummies show that in both countries the 'average' placement has improved considerably afterwards. These results are compatible with the idea that the occupational structure in Italy was downward-shifted compared to the Netherlands for all periods considered. Taken together, the results from M2 and M3 underlie that not only Dutch men generally start their career with higher occupational status compared to Italians, but they also seem to benefit from a greater pace of occupational progression in the first 10 years of their career.

Looking at the role of social origin, it is clear how advantages mainly concentrate among the service class, whereas differences between the middle and the lower classes are more limited. Moreover, while differences between the middle and the lower classes are similar in the two countries (around 3 points), the positive effect of having parents from the service class (I, II) rather than the working class (V, VI, VII) is much more pronounced in Italy (16 points) compared to the Netherlands (10 points). Therefore, the service class seems able to maintain a stark advantage compared to the working class in both countries, but especially in the Italian context.

M4 confirms how the total effect of social origin on occupational attainment is mediated by educational attainment – although a significant direct effect of social origin remains in both countries. More precisely, the estimates show that almost approximately two-third of the total effect of having parents from the service class rather than the working class (see M3) is mediated by educational attainment in both countries,

whereas the remaining one-third is attributable to a direct influence of social origin. In line with *H1* and previous literature, this direct effect seems slightly larger in Italy than in the Netherlands, especially if we consider that the direct effect for the Dutch case might be slightly inflated (see par. 4.3.1). Conversely, the direct advantages of having a 'middle' versus a 'low' social origin is limited in magnitude and pertains only to the Italian case: this latter result underlies that the main social cleavage pertains those at the top of the class structure – on the one hand – and all other social classes – on the other. Worth noting is that, in both countries, the effect of education is substantially larger compared to the direct influence of social origin. Moreover, the coefficients of labour market entry cohort dummies drop almost to zero when adding the level of education, thus suggesting that the occupational upgrading across cohorts shown in model 3 is entirely captured by the process of educational expansion.

In M5, both social origin and educational attainment are interacted with labour market entry cohort. This model allows us to examine whether the direct effect of social origin (and that of education) has changed across cohorts. Estimates provide mixed signs of modernisation looking at the second half of the 20th century. On the one hand, the most important result in our context is that the direct effect of having parents from the service class is quite constant across cohorts in Italy, whereas in the Netherlands, a non-statistically significant decline is observed comparing the entry cohort 1981–95 with the earlier cohorts. Moreover, while among the first cohort in Italy we do not find any direct effect of having parents from the intermediate rather than the working class, in the successive two cohorts a small direct effect seem to be in place (around 2 ISEI points). These results disconfirm modernisation theory, which predicts decreasing direct intergenerational transmission of advantages over historical time. On the other hand, higher education seems to pay more for Dutch men entered the labour market after 1980. Given that a process of credential inflation occurred in the Dutch context (van der Ploeg, 1996), this latter result suggests that meritocracy has gained importance in the job-allocation process over historical time. Finally, in Italy, the absolute pay-off to

educational qualifications decreases across cohorts, in line with recent findings (Ballarino and Scherer, 2013).[49]

M6 adds to the previous model interactions between the labour market entry cohort dummies and two terms for career duration. This model is used to understand whether the role of career duration for the early occupational advancement differs across successive cohorts of labour market entrants, net of cohort-specific compositional effects in terms of social origin and level of education. In Italy, the limited rates of career progression are very similar across cohorts, in line with *H2*: although statistically significant, differences between the last two cohorts and the first one are substantially trivial (the average increases after 10 years of career is around 1.9, 2.6 and 1.7 ISEI points for the first, the second, and the third cohort respectively).[50] Results for the Netherlands offer a different picture and also confirm *H2*: while the difference in the growth rates between the first and the second cohort is very limited (10 years of career lead to an increase of 3.1 and 3.7 ISEI points, respectively), Dutch men entered first employment after the reforms occurred in the 1980s seem to enjoy a faster rate of career progression compared to pre-reforms cohorts. Here, the average increase after 10 years of career is around 4.7 points.[51] All in all, in compliance with our expectations, these results confirm that the pace of career progression is higher for Dutch- compared to Italian men in all entry cohorts, and that this gap has even increased in coincidence with institutional changes and labour market reforms introduced in the beginning of 1980s in the Netherlands. Substantively, these latter results imply that initial class inequalities

[49] This latter trend is probably connected to changes in the marginal distribution of education and occupation leading to a strong process of credential inflation in the Italian context, but it may also be affected by changes in the allocation mechanism in the labour market over historical time (caught by relative returns to education).

[50] First cohort (1.95) = 0.175*10+0.002*100; second cohort (2.62) = (0.175+0.187)*10+(0.002–0.012); third cohort (1.75) = (0.175+0.190)*10+(0.002–0.021)*100.

[51] In the Netherlands, the interactions between the labour market entry cohort dummies and the two terms for career duration are jointly significant (Wald tests for joint significance: χ^2 =87.53, df=4, p=0.00). A further inspection of the single interaction coefficients show that differences are only significant when comparing the first labour market entry cohort to the following two cohorts.

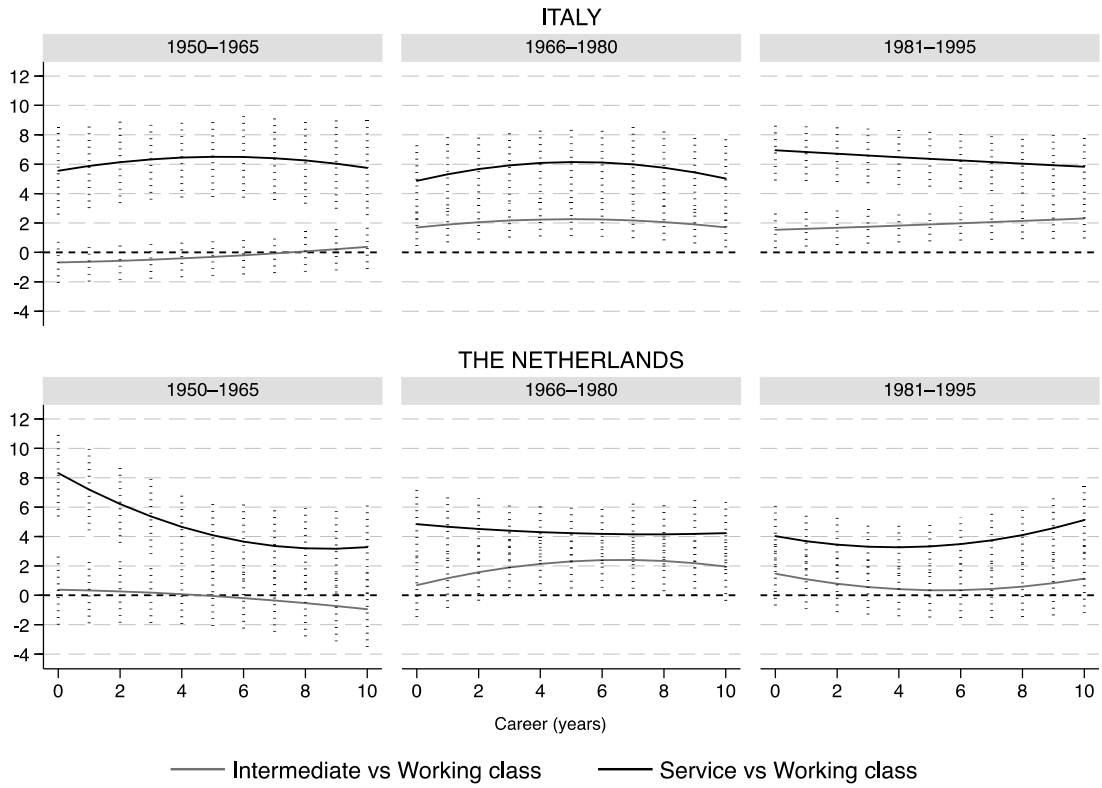
should be more likely to change over the early life course in the Netherlands, and especially for the cohorts entered the labour market after the 1980's.

4.4.2 Early career progression and the direct effect of social origin across countries and cohorts: accumulation, compensation or stability?

In the previous section, I found that the direct effect of social origin on occupational attainment is rather persistent over historical time in both countries. This result strongly contradicts modernization theories, which postulated a secular trend towards a decline in the importance of social origins for occupational destinations. However, we only provided a 'snapshot' of the direct social origin effect by looking at the 'average' occupational attainment along one's early career. This leaves open the question of whether the direct effect of social origin emerges at the career onset and whether (and how) differences in the paces of career progression of people from different social origin account for a compensation, accumulation or stability of the initial penalty over the early career (independently of educational attainment).

Figure 4.1 reports the estimated average differences in ISEI scores along the early career for people hailing from the service class (I, II) and the intermediate class (III, IV) compared to the working class (V, VI, VII) across countries and cohorts. Cohort-specific controls for level of education and their interactions with career duration are included.[52] The starting points of the lines represent the direct effect of social origin at labour market entry (at career=0), whereas the slopes represent the evolution of the direct social origin effect over the first 10 years of career. If confidence intervals overlap the zero-line, the direct effects of hailing from the service and intermediate class compared to the working class are not statistically significant. If confidence intervals relative to each comparison do overlap widely along the career, intragenerational changes in the direct social origin effect are not statistically significant.

[52] Full table with original coefficients are in the Appendix (Table A9).



Source: Own elaboration based on ILFI and FSDP data

Figure 4.1 – Growth curve models: predicted average differences in ISEI along the first 10 years of occupational career (and 95% confidence intervals) comparing youngsters hailing from the service and the intermediate classes with youngsters hailing from working class. Net of educational attainment

Figure 4.1 confirms some general findings from Table 4.1. Firstly, the direct social origin effect is rather stable across successive entry cohorts in both countries: social origins still influence occupational destinations. Secondly, the direct effect of having parents from the top of the class hierarchy is generally higher in Italy compared to the Netherlands. Thirdly, while in the Netherlands advantages seem limited to youngsters hailing from the service class, in Italy also having parents from the intermediate rather than the working class offers an advantage for the cohorts entered the labour market after 1965. This latter result suggests the Italian social structure being more hierarchical compared to the Dutch one, where only those hailing from the service class enjoy a

substantial advantage compared with those hailing from the bottom of the class hierarchy.

Moving to the role of career mobility for intergenerational reproduction of inequality, the figure shows strong persistency of the direct social origin effect over the early life course. The direct effect is evident already at labour market entry and remains stable over the first 10 years of career. This result applies both to Italy and the Netherlands, and to almost all labour market entry cohorts considered. Therefore, level of education being equal, neither youngsters hailing from the service class nor youngsters hailing from the intermediate class enjoy different rates of career progression compared to youngsters hailing from the working class, in both countries. The substantive conclusion drawn from this evidence is that career mobility does not account for any accumulation or compensation of direct inequality over the early life course.

The first entry cohort (1950–65) in the Netherlands is the only exception to this scenario of intragenerational stability. Here, the direct benefits of having parents from the service rather than the working class (which are higher in the beginning of the career: around 8 ISEI points), significantly decrease during the early work life until reaching – after 10 years – the level observed for the two successive cohorts in the same country (around 4 ISEI points). These results offer mixed support for our hypotheses, which expected intragenerational stability in Italy (*H3*) and accumulation in the Netherlands (*H4*).

Worth noting is that this scenario of intragenerational stability of the direct social origin effect holds irrespective of differences in the rates of career mobility that we found between the two countries and across the three labour market entry cohorts. In Italy, the low level of career mobility we found for the whole period considered seems to justify the absence of differences in the patters of career growth, consistently with *H3*. Conversely, contrary to *H4*, the higher chances of career mobility found in the Netherlands, and especially for those entered the market after 1980, seems to have developed quite homogeneously and without favouring any social class in particular.

4.4.3 Explaining the intragenerational stability of the direct effect: do parents play a role beyond the first job?

The persistency of the direct social origin effect along the early life course does not imply that parents do not play any role beyond the first placement of their offspring on the labour market. Indeed, contrasting mechanisms either pushing toward accumulation or compensation over the early career could be at work at the same time.

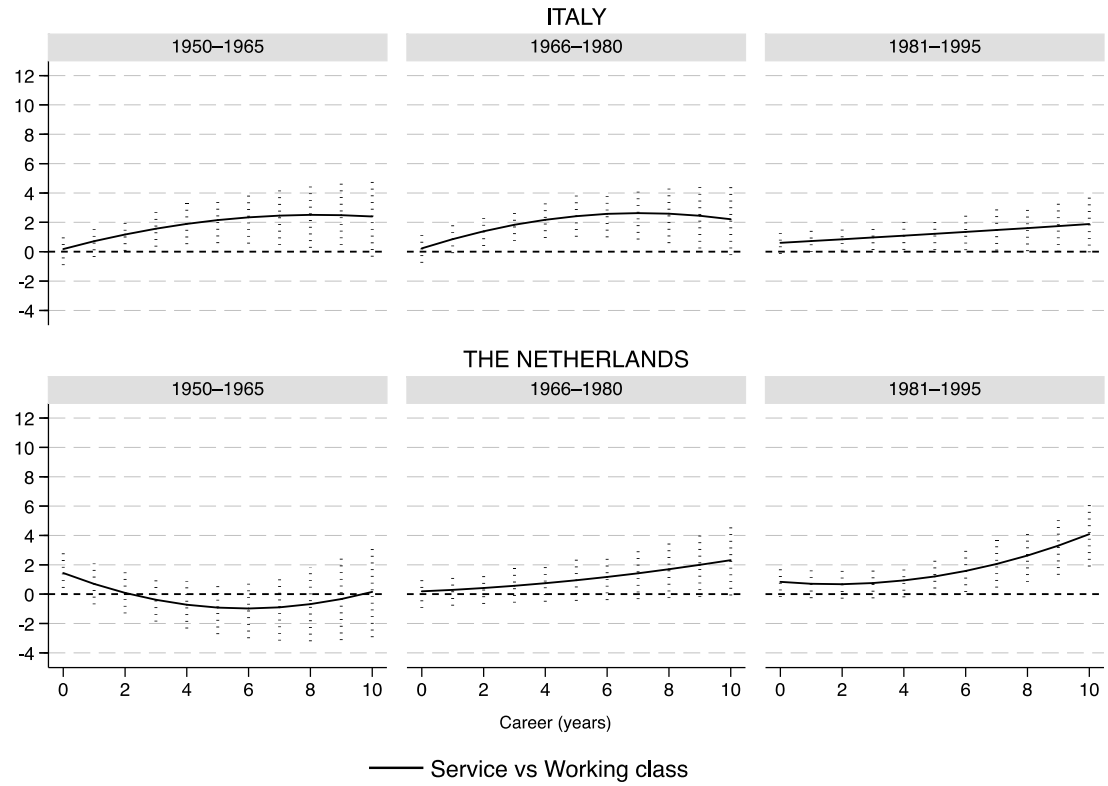
Figure 4.2 reports the evolution of the direct social origin effect over the first 10 years of career (as in Figure 4.1) once cohort-specific controls for the ISEI score of the first job and its interaction with career duration are included as covariates. Intuitively, this specification cancels out the direct effect of social origin at labour market entry (when career=0), and allows examining differences in the early career trajectories comparing people hailing from different social classes but with the same level of education who entered first employment in job positions characterised by the same ISEI score. In this way, we are able to see whether the direct effect of social origin extends above and beyond what is mediated by the first occupation. We only report the contrast between the service and the working class, since estimates of the differences between the intermediate and other classes are neither statistically nor substantially significant.[53] Hence, the main differences occur between youngsters hailing from the top of the class structure and those hailing from the bottom.

In both countries and entry cohorts – with the exception of cohort 1950–65 in the Netherlands – social origin seems to play a direct role in affecting the early career beyond what is mediated by the occupation attained at labour market entry. Indeed, when comparing individuals with the same level of education who entered first employment in the same position, descendants from the service class show a higher rate of early career progression compared to descendants from the working class. After 10 years of career, the higher rates of progression of youngsters hailing from the service class lead to an advantage of approximately 2 to 3 ISEI points in Italy (cross-cohort

[53] The figure including the contrasts between the intermediate and the working class and the table with original coefficients are in the Appendix (Figure A2 and Table A10, respectively).

difference are substantially negligible) and 2 to 4 points in the Netherlands (for the second and third cohorts respectively).

Although these results should be handled with caution (in same cases, differences are statistically significant at the 10% level)[54], the analyses show how the direct effect of social origin cannot be solely traced back to its effect at labour market entry in neither of the two countries. When having the same educational level and first entering the labour market in the same occupation, pupils hailing from the service class enjoy a higher rate of career progression compared to their counterparts from the working class.



Source: Own elaboration based on ILFI and FSDP data

Figure 4.2 – Growth curve models: predicted average differences in ISEI along the first 10 years of occupational career (and 95% confidence intervals) comparing youngsters hailing from the service and the working class. Net of educational attainment and ISEI at labour market entry

[54] In Italy, the *p* values of the differences in ISEI scores after ten years of career are .085, .075 and .054 for the three successive cohorts, respectively. In the Netherlands, *p* values for the cohorts 66–80 and 81–95 are .058 and .000, respectively.

In other words, there is evidence that, both in Italy and the Netherlands, social origin still plays a role not only above educational attainment, but also beyond what is mediated by the first placement in the occupational structure. Interestingly, the role of social origin beyond the first occupational position seems stronger for Dutch men from the post-reforms cohort compared to the earlier labour market entry cohorts (4 versus 2 ISEI points after 10 years of career, respectively) – although this difference is not statistically significant. Hence, if anything, it seems that increased chances of occupational mobility favoured by Dutch labour market reforms after the 1980s has coincided with increased chances of the upper classes to directly influence the rate of upward career mobility of their descendants, rather than with increased chances of less-advantaged offspring to recover the initial penalty.

Why then is the direct effect of social origin stable over the early life course when the first job is not considered, as shown in Figure 4.1? The answer lies in the initial advantages of individuals from a higher social origin. As shown by the negative covariance between intercepts and slopes in Table 4.1, a higher ISEI at labour market entry is indeed associated with a lower rate of career progression, i.e. a ceiling effect is in place. The negative sign of the lower order interactions between career duration and the ISEI score of the first job in both countries further confirms the presence of ceiling effects (see Table A10 in the Appendix). Given that those starting higher in the occupational hierarchy enjoy lower rates of progression (even if they end up higher), and that persons hailing from the service class enjoy better initial placement net of educational attainment (see Figure 4.1), it logically follows that individuals from the service class are more prone to ceiling dynamics.

In sum, the intragenerational stability of the advantage of offspring from the service class observed in Figure 4.1 is the result of contrasting forces counterbalancing each other in both countries. On one hand, a better placement at the onset of the career – typical of offspring from the service class – represents a structural constraint that has to be taken into consideration when evaluating the chances of further career advancement. On the other hand, consistently with a counter-mobility perspective, the role of discrimination, non-cognitive skills, aspirations, habitus and social capital, and direct

inheritance of material resources seem to gain increasing importance during the early work life, thus disproportionally favouring descendants from the service class.

4.5 Discussion and conclusions

I examined the direct influence of social origin on occupational attainment of Italian and Dutch men who entered the labour market between 1950 and 1995. Contrary to most previous studies, I adopted a dynamic perspective looking at the evolution of the direct social origin effect across the early life course, namely, the first 10 years after labour market entry. This strategy allows us to understand whether the direct effect of social origin on occupational attainment appears at the onset of careers, and whether this effect increases, decreases or remains stable in the early life course. Moreover, I explored some mechanisms behind the intragenerational evolution of the direct social origin effect, in order to understand whether parents play a role beyond the labour market entry of their offspring.

Consistently with previous studies, and in line with our theoretical expectations, the direct effect of social origin on the 'average' occupational attainment over 10 year of career is generally larger in Italy compared to the Netherlands. This result confirms previous findings for Italy, and speaks in favour of studies reporting a sizeable direct effect of social origin in the Dutch context. Moreover, the direct social origin effect seems rather stable over historical time in both countries. This persistency questions whether theories of economic and cultural modernization offer a valuable synthesis of the processes occurred in Western countries over the 20th century. However, the analyses focused only on post WWII-period, and we know from previous studies that a great part of the decline is due to the comparison of pre- and post-war labour market entry cohorts.

I have also shown that early career mobility varies greatly cross-nationally. In Italy, the prevalence of small firms, the importance of agriculture sector in southern regions, the strong corporatism of liberal professions, and the traditionally strong restrictions on labour and product markets substantially limit the opportunities for career growth.

Conversely, notwithstanding occupational boundaries are stronger in the Netherlands compared to Italy, the Dutch economic and institutional structure seems to offer wider opportunities for early occupational upgrading. Here, large enterprises offering wide opportunities for career advancement were crucial until the 1970s, and both the early shift to a service-based economy and the importance of public sector fostered the opportunities for occupational progression. Moreover, starting from the 1980s, institutional reforms in response to the crisis of the fordist model found weak opposition of Dutch trade unions. These reforms in the economic domain allowed higher flexibility on labour and product markets, and have resulted in higher chances of early career mobility for Dutch men who entered the market after 1980. Instead, consistently with the institutional inertia of Italian context, I found no changes in the low chances of men's early career mobility along the last half of the 20th century.

Notwithstanding these cross-country and cross-cohort differences in the levels of early career mobility, our results indicate that – level of education being equal – offspring hailing from upper classes always enjoyed similar rates of career growth compared to offspring from less-advantaged families. Hence, the direct effect of social origin is visible at the onset of one's career, and then remains stable over the first 10 years on the labour market. In other words, descendants from the service class enjoyed and continue to enjoy a substantial 'life course' occupational advantage compared to offspring from the working class. As said, this holds in both countries and for almost all cohorts, i.e. in contexts characterised by different institutional restrictions to early career mobility. Hence, it seems that early career mobility does account neither for accumulation nor for compensation of the initial penalty.

While this scenario of intragenerational stability was expected in Italy (given the generally high restrictions to career mobility for all young people), it also holds for the Netherlands. In the Dutch context, career mobility is generally higher, and the market flexibilisation occurred in the 1980s further increased the *level* of career mobility, but had no implications for the *distribution* of career opportunities among social classes.[55]

[55] An exception to this pattern is the cohort of Dutch men who entered the labour market in the period 1950–65. Here, the direct effect of social origin is higher at the onset of career and then

More generally, our results question whether increasing efficiency in the economic domain affects the extent of social inequality. Indeed, Italy is traditionally a rigid market economy, where liberalization is often advocated as an instrument to reduce market failures and to increase meritocratic person-job matches. However, our results suggest that even in countries with lower restrictions to occupational mobility – such as the Netherlands – abscriptive advangates at labour market entry are hardly equalised by the mechanisms underlying the occupational progression.

I also tried to shed some light on the mechanism producing the stability of the direct effect of social origin over the early career. I postulated that the mechanisms underlying the accumulation or compensation scenarios are possibly at work at the same time, such that the intragenerational stability we observe is the result of contrasting dynamics. I also expected this latter scenario being more likely in the Dutch context, where the lower restrictions to career mobility leave more room for disproportionate chances of occupational progression among social classes.

In this respect, my results show how social origin plays a direct role on career opportunities beyond what is mediated by the first occupation at labour market entry – in both countries and for the majority of the entry cohorts considered. Indeed, individuals from the service class seem to benefit from higher rates of career progression compared to equally educated counterparts from the working class who entered the first job with the same occupational status. This result might indicate the presence of counter-mobility mechanisms favoured by socially stratified unobservables (such as non-cognitive skills, aspirations, and social contacts) becoming particularly

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decreases substantially over the first 10 years on the labour market. This pattern reflects the lower rate of career growth of individuals hailing from the service class compared to the working class, the latter being able to partly recover the initial disadvantage in the early life course. This latter result exemplifies the benefits of analysing intergenerational social mobility from a life course perspective. When only looking at social inequality at labour market entry, in our empirical results one would conclude that the direct effect of social origin is declining over historical time in the Netherlands. However, a pattern of historical persistency is found when looking at the direct social origin effect after 10 years on the labour market. Part of the inconsistencies of previous findings on the Dutch case could be due to this caveat.

effective after the labour market entry. Yet, it may also be that employers discriminate young workers from low-origin families when it comes to assign promotions, or that inherited material resources are exploited only after probation periods in low-ranked positions (e.g. in a family business).

Strikingly, the role played by the class background along the career seems stronger in contexts characterised by higher economic efficiency (less regulation and more mobility) – that is, in the Netherlands compared to Italy, and for post- compared to pre-reforms cohorts in the Dutch context. Again, this result suggests that increasing deregulation and liberalisation in the economic domain does not automatically translate in increasing equality. On the opposite, it seems that high market efficiency gives the service class the possibility to further push their offspring's careers beyond the first labour market entry. However, ceiling effects are at work in such situation, and counterbalance this additional advantage enjoyed by offspring from the service class.

The result of these two contrasting forces, interestingly enough, is the stability of the initial advantages over the early work life. Whether this persistency is the result of a precise and voluntary strategy of service class families aimed at counterbalancing ceiling effects and maintaining a constant, life course advantage compared to working class families is an issue to be explored.

CHAPTER 5

CONCLUSIONS

This thesis examined the process of entry into the labour market and the early occupational development in comparative perspective. In particular, I explored the role of several institutional characteristics in affecting the entry into the first employment, the occupational progression after a flexible labour market entry, and the emergence and the evolution of class-based inequality over the early occupational career.

Starting from the theoretical distinctions between *Internal vs Occupational labour markets* and *Coordinated vs Liberal market economies*, I illustrated how several institutional characteristics may affect the process of entry into the labour market. These classifications offer a nice overview of the role of the vocational orientation the education systems and the employment protection legislation. Nonetheless, these specific taxonomies – as well as other classifications of institutional regimes – have been incapable of classifying Southern European countries, and of explaining variations in the modes of the school-to-work transition within each country grouping. In the theoretical chapter, I argued that these deficiencies are likely connected to the simplistic view of some institutions and the omission of other potentially relevant institutional characteristics.

I argued that three specific additional issues may indeed help explain contextual variations in the school-to-work transition processes in the European context: the strictness in the regulation of product and service markets, the extent to which deregulation of employment relationship has been partial and targeted, and the ambivalence in the role of trade unionism. In the empirical chapters, these three additional issues have been considered alongside traditional institutional characteristics identified by previous literature on the school-to-work transition, such as the employment protection legislation and the vocational orientation of the education system.

5.1 Key findings

In the first empirical chapter (chapter 2), I analyzed the speed of entry and the quality of first employment in a variety of European countries. Here, I confirmed some well-established results in the literature and tested new hypotheses about the importance of institutional features not considered so far.

The main finding is that the strictness of employment protection legislation and product market regulation seem to come along with a macro level trade-off between speed and quality. Indeed, strong restrictions in the labour- and product market domains delay the transition from education to the first job, but – in the long run – ensure better initial placements in the occupational hierarchy. The vocational orientation alone seems to favour both the speed of entry and the quality of the first employment.

While some of these findings are well established in previous research, I added to existing literature in three ways. First, I considered a relevant institutional characteristic not considered so far by sociological literature, i.e. the regulation on the service and product market. Second, I provided a more stringent empirical test for the role of the above-mentioned institutional characteristics by controlling for the possible confounding effect of national idiosyncrasies. Third, I provided a theoretical and empirical distinction between the influence of the long-term contextual setting associated with each of the three institutional features and the influence of short-term institutional changes. With regards to this latter point, the chapter provided evidence that the speed of entry is influenced by both short-term institutional changes and the long-term institutional settings associated with three institutional characteristics considered, whereas the quality of the first employment is only sensitive to long-term institutional arrangements.

Finally, the chapter also underlined the importance of considering the interactions between different institutional spheres from both a theoretical and an empirical standpoint. In line with the theoretical argument put forward by Breen (2005) and Scherer (2005), I showed that the detrimental effect of strong employment protection legislation on the speed of transition is indeed far less visible in contexts where the educational systems provide students with well-recognized educational qualifications.

This result is consistent with the theoretical mechanisms underlying the influence of employment protection legislation and the vocational orientation: employers may indeed avoid long screening processes aimed at reducing the cost of a potential job-person mismatch when applicants' skills are certified by the educational system.

With regard to the possible interactions between labour and product market legislations, the chapter underlined how the negative consequence of strict regulations in the product market are indeed exacerbated when also the labour regulations are tight. This result is consistent with the idea that the benefit of deregulating the product market is higher when strong employment protection concurs in delaying the transition from education to employment. From a substantive point, this result suggests labour- and product market regulations being two alternative policy leverages to boost the speed of transition into the first employment.

In chapter 3, I examined the occupational progression of youngster entered the labour market with a fixed-term contract, i.e. those youngsters whose occupational destinies may be more at risk of disruption. Indeed, it is often claimed that fixed-term employment at the beginning of the career undermines subsequent career progression – an idea usually recalled as the *entrapment* hypothesis. Relatedly, the s*tepping stone vs trap* literature usually claims that the extent to which this entrapment scenario applies depends on the actual level of segmentation within a labour market. The chapter contributed to this debate by examining whether fixed-term entrants experience worse occupational progression in contexts of strong labour market segmentation than in contexts of weak segmentation.

Two related dimensions of labour market segmentation are theoretically considered and empirically evaluated: the gap in the protection of permanents and temporary contracts, and the strength of trade unions. The main finding is that strong EPL gap and strong unionism fosters barriers across labour market segments and decreases the chances of contractual and occupational upgrading after a flexible labour market entry. In particular, fixed-term entrants are more likely to remain in fixed-term employment in the early career when permanent contract are disproportionally protected compared to temporary contracts. Moreover, youngsters entered the first employment in a fixed-term

position are less likely to move on the occupational ladder in contexts of strong unionism than in contexts of weak unionism. Finally, there is also evidence that a shift to permanent contract is more often associated with upward mobility in strongly rather than weakly unionised labour markets.

Two broad take-home messages arise from these findings. First, the disproportion in the protection of temporary compared to permanent contracts represents a significant source of labour market segmentation independently on the level of protection of permanent contracts. Therefore – in addition to the overall level of employment protection – the disproportion *per se* is an important dimension deserving specific consideration when focusing on labour market issues, especially in the case of youth studies. Second, unions exert an ambivalent role when protecting the interest of insiders over the interests of outsiders. This ambivalence is rather clear in the case of young people entering the first employment in a fixed-term position, that – in the case of strong unionism – have low chances of both upward and downward occupational mobility. Therefore, while often claimed to defend the interest of all workers, trade unions may in practise favour certain social groups at the expense of others.

In the last chapter, I examined the emergence of class-based inequalities on occupational attainment at labour market entry, and their evolution over the early occupational career. In particular, the focus was on the more 'pure' form class-based inequality, i.e. the influence of social origin on top of educational attainment. The comparison between the Italian and the Dutch contexts over the second half of the 20th century offered useful insights to interpret the role of institutions for the evolution of class-based inequality in the early life course.

The main finding is that the direct effect of social origin on occupational attainment is extremely stable over biographical and historical time. Although stronger in Italy than in the Netherlands, a direct effect of social origin is visible at the onset of the career and then remains virtually constant up to 10 years after the first labour market entry, in both countries. This result confirms the *loci* of intergenerational reproduction being generally located at labour market entry rather than at later points in the biographies of individuals.

What is more, this scenario of intragenerational stability of class-based inequalities regards both Italy and the Netherland and almost all labour market entry cohorts analysed. This latter result is particularly interesting, since the extent of early career mobility is substantially higher in the Netherlands compared to Italy, and especially for the Dutch cohorts entered the labour market after 1980. Therefore, it seems that institutional and structural characteristics affecting the level of career mobility have weak implications for the distribution of career opportunities among different social groups. Moreover, the strength of the direct social origin effect is indeed similar across successive cohorts of school-leavers, thus questioning whether there has been any meritocratic modernization of the job-allocation process in the last half of the century.

In broad terms, these results entail at least two important conclusions. First of all, modernization theories and theories predicting the end of class barriers found no confirmation. These theories generally postulate that meritocracy has gained increasing importance in the job-allocation processes at the expense of inheritance, and that class-based inequalities are constantly vanishing moving towards post-modern societies. However, a direct effect of class background on the occupational destination is still there, and seems not to have weakened during the last half of the 20th century.

Second, increasing efficiency in the labour market domain does not necessarily translate in decreasing class-based inequalities over the early occupational career. Indeed, low restrictions to career mobility fostered by liberalisation reforms neither coincide with lower class-based inequality at the career start, nor account for the reduction of these inequalities with occupational progression. It is therefore questionable whether liberalising the market domain is a viable solution in order to dismantle existing class-based inequalities in the job-allocation process.

5.2 Concluding remarks

This work confirmed the importance of the institutional context in shaping the school-to-work transition in Europe. Institutions not only influence the speed and the quality of the first labour market entry, but also the occupational destinies after a first

flexible entry and the way the parental background is associated with early labour market success.

While confirming the importance of classic institutional characteristics – such as the employment protection legislation and the vocational orientation of the education system – this work underlined the importance some other additional issues. First of all, the regulation in the product and service market domain is a relevant piece of the puzzle when it comes to explain contextual variations in the occupational patterns of young Europeans. In fact, product market regulation affects the transitions from education to the first employment on top of the employment protection legislation. Moreover, as far as the speed of entry is concerned, the negative role of product market regulation is particularly pronounced when also employment relationships are strictly protected. Hence, product market regulation may help in explaining the considerable length of the transition from education to the first employment found in Southern European countries, where both labour and product market regulations are traditionally strict.

The second relevant issue is again the employment protection legislation, but in the context of the partial and targeted form of deregulation of employment relationships that have been implemented in response to globalisation pressures. Strong disproportion in the protection of permanent and temporary contracts has been shown to increase labour market segmentation and to foster career immobility after a flexible labour market entry. Crucially, this disproportion explains variations in the extent to which fixed-term entrants remain trapped in fixed-term employment within the country-clusters considered. Hence, it can be concluded that the EPL gap is an important determinant of the variability in the outcomes of the school-to-work transition across countries that are similar in many other respects.

Finally, the thesis underlined that trade unionism plays a complex role which is far from being clear-cut and unambiguous. Strong union indeed fosters labour market segmentation and occupational immobility after a fixed-term labour market entry. As far as fixed-term entrants are concerned, strong unionism not only impedes opportunities of upgrading, but also the risk of further downgrading on the occupational ladder. Moreover, the comparison between Italy and the Netherlands also showed how

trade unions indeed reacted very differently to liberalisation pressures, thus impacting differently on the extent of career mobility. This latter consideration suggests that contextual variations in the extent to which unions defend their corporatist interests against market reforms may indeed explain some of the variability in the patterns of early occupational progression found in Europe.

A final important consideration regards the persistency of class-based inequalities across both biographical and historical time. While influencing the degree of career mobility to a considerable extent, the institutional characteristics considered in this thesis do not influence the distribution of career mobility among descendants of different social classes. Again, this latter consideration suggests that liberalisation reforms in the market domain do not offer any answers to the attempt of abating ascriptive inequalities in Western societies.

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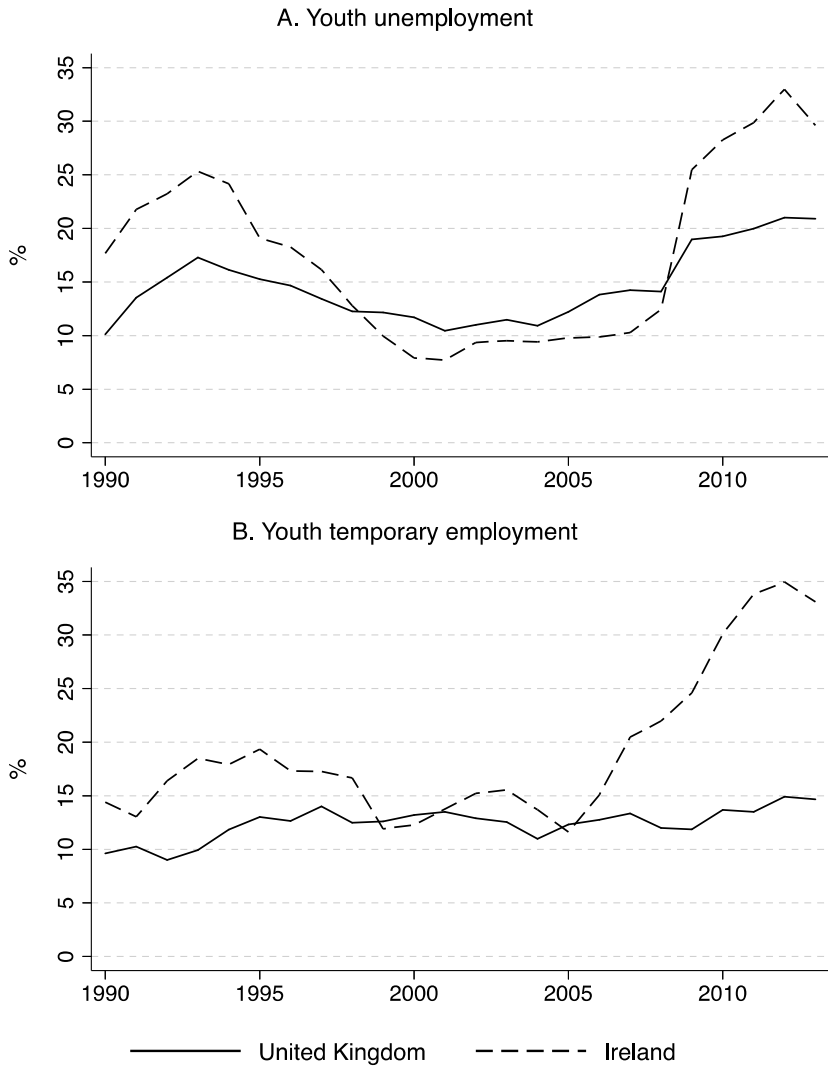
APPENDIX

CHAPTER 1



Source: Own elaboration based on OECD data (2014a)

Figure A1 – Youth unemployment and temporary employment rates in United Kingdom and Ireland

CHAPTER 2

Table A1 – Sample size by country and school-leaving cohort combinations (N=105,237)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
AUSTRIA	230	232	227	282	285	298	322	311	310	330	356	336	381	529	112
BELGIUM	124	170	141	202	224	218	204	209	213	221	228	238	280	266	43
CZECH REP.	408	414	393	393	417	360	379	418	423	364	360	388	335	359	221
DENMARK	39	41	49	66	72	87	110	93	109	137	180	238	288	383	86
SPAIN	523	571	567	710	762	821	762	805	796	873	883	887	892	861	475
FINLAND	53	59	77	96	130	159	142	182	235	234	270	309	321	436	304
FRANCE	199	272	344	443	404	453	449	436	417	400	425	460	514	548	262
GREECE	502	577	579	658	615	614	570	575	532	582	530	445	452	451	53
HUNGARY	495	553	536	603	556	605	534	582	599	657	637	649	584	701	106
IRELAND	425	449	545	645	662	626	574	624	604	655	640	680	746	727	313
ITALY	1065	1035	1146	1103	1050	1094	1052	1020	1085	1167	1166	1176	1161	1172	217
THE NETHERL.	213	265	323	420	468	535	563	634	682	750	763	866	921	914	400
NORWAY	88	91	127	132	118	155	169	187	209	211	237	231	254	327	136
POLAND	343	340	351	397	353	462	396	460	464	517	554	555	544	588	100
PORTUGAL	214	223	243	293	277	285	245	284	266	307	342	361	371	498	91
SWEDEN	154	154	182	243	261	337	294	328	377	421	496	559	610	691	437
UTD KINGDOM	88	104	121	108	121	115	120	125	100	111	111	86	49	96	16

Table A2 – Institutional variations over time: Vocational orientation, Employment protection legislation, and Product market regulation

	AUSTRIA	BELGIUM	CZECH REP.	DENMARK	SPAIN	FINLAND	FRANCE	GREECE	HUNGARY	IRELAND	ITALY	NETHERL.	NORWAY	POLAND	PORTUG.	SWEDEN	UNITED KINGDOM
VOCATIONAL ORIENTATION																	
1995	0.394	0.533	0.443	0.277	0.25	0.293	0.284	0.157	0.395	0.097	0.431	0.485	0.319	0.475	0.123	0.314	0.185
1996	0.394	0.537	0.46	0.278	0.278	0.293	0.287	0.16	0.368	0.094	0.427	0.48	0.331	0.472	0.133	0.31	0.184
1997	0.394	0.521	0.424	0.271	0.235	0.299	0.275	0.166	0.367	0.093	0.426	0.412	0.339	0.452	0.129	0.31	0.173
1998	0.379	0.504	0.366	0.264	0.15	0.291	0.25	0.166	0.043	0.102	0.381	0.309	0.304	0.448	0.126	0.261	0.134
1999	0.349	0.488	0.34	0.269	0.135	0.307	0.254	0.131	0.055	0.111	0.375	0.334	0.316	0.442	0.121	0.309	0.194
2000	0.35	0.471	0.363	0.281	0.126	0.335	0.254	0.162	0.051	0.12	0.144	0.337	0.329	0.439	0.118	0.303	0.199
2001	0.351	0.454	0.387	0.29	0.136	0.354	0.249	0.181	0.057	0.129	0.154	0.348	0.323	0.434	0.141	0.316	0.196
2002	0.352	0.438	0.392	0.271	0.143	0.361	0.247	0.215	0.065	0.138	0.16	0.341	0.318	0.339	0.144	0.295	0.207
2003	0.349	0.421	0.39	0.265	0.134	0.373	0.249	0.188	0.065	0.146	0.154	0.346	0.323	0.303	0.138	0.281	0.192
2004	0.379	0.405	0.389	0.274	0.139	0.282	0.262	0.179	0.135	0.155	0.376	0.519	0.33	0.252	0.141	0.271	0.229
2005	0.384	0.404	0.392	0.27	0.157	0.286	0.264	0.192	0.136	0.159	0.37	0.514	0.327	0.236	0.165	0.274	0.234
2006	0.387	0.408	0.394	0.268	0.156	0.288	0.194	0.177	0.136	0.16	0.37	0.462	0.326	0.235	0.167	0.28	0.182
2007	0.387	0.416	0.384	0.265	0.16	0.291	0.199	0.16	0.136	0.162	0.371	0.465	0.323	0.245	0.183	0.293	0.186
2008	0.389	0.417	0.387	0.26	0.161	0.293	0.2	0.159	0.141	0.165	0.369	0.469	0.311	0.261	0.221	0.305	0.134
2009	0.396	0.417	0.392	0.259	0.157	0.298	0.198	0.157	0.144	0.172	0.363	0.472	0.3	0.276	0.25	0.316	0.125
EMPLOYMENT PROTECTION LEGISLATION																	
1995	0.219	0.771	0.083	0.229	0.542	0.208	0.604	0.792	0.104	0.042	0.792	0.229	0.521	0.125	0.562	0.295	0.042
1996	0.219	0.771	0.083	0.229	0.542	0.208	0.604	0.792	0.104	0.042	0.792	0.229	0.531	0.125	0.562	0.295	0.042
1997	0.219	0.771	0.083	0.229	0.542	0.208	0.604	0.792	0.104	0.042	0.792	0.229	0.531	0.125	0.469	0.24	0.042
1998	0.219	0.396	0.083	0.229	0.542	0.26	0.604	0.792	0.104	0.042	0.604	0.229	0.531	0.125	0.469	0.24	0.042
1999	0.219	0.396	0.083	0.229	0.542	0.26	0.604	0.792	0.104	0.042	0.604	0.156	0.531	0.125	0.469	0.24	0.042
2000	0.219	0.396	0.083	0.229	0.542	0.26	0.604	0.792	0.104	0.042	0.542	0.156	0.5	0.125	0.469	0.24	0.042
2001	0.219	0.396	0.083	0.229	0.542	0.26	0.604	0.792	0.104	0.042	0.542	0.156	0.458	0.125	0.469	0.24	0.042
2002	0.219	0.396	0.083	0.229	0.542	0.26	0.604	0.792	0.104	0.042	0.396	0.156	0.458	0.125	0.469	0.24	0.042
2003	0.219	0.396	0.083	0.229	0.542	0.26	0.604	0.792	0.104	0.042	0.333	0.156	0.458	0.042	0.469	0.24	0.062
2004	0.219	0.396	0.083	0.229	0.542	0.26	0.604	0.458	0.188	0.104	0.333	0.156	0.458	0.292	0.427	0.24	0.062
2005	0.219	0.396	0.188	0.229	0.542	0.26	0.604	0.458	0.188	0.104	0.333	0.156	0.458	0.292	0.427	0.24	0.062
2006	0.219	0.396	0.188	0.229	0.542	0.26	0.604	0.458	0.188	0.104	0.333	0.156	0.5	0.292	0.427	0.24	0.062
2007	0.219	0.396	0.188	0.229	0.5	0.26	0.604	0.458	0.188	0.104	0.333	0.156	0.5	0.292	0.427	0.24	0.062
2008	0.219	0.396	0.188	0.229	0.5	0.26	0.604	0.458	0.188	0.104	0.333	0.156	0.5	0.292	0.323	0.135	0.062
2009	0.219	0.396	0.188	0.229	0.5	0.26	0.604	0.458	0.188	0.104	0.333	0.156	0.5	0.292	0.323	0.135	0.062
PRODUCT MARKET REGULATION																	
1995	0.399	0.454	0.441	0.185	0.435	0.139	0.436	0.545	0.463	0.209	0.599	0.239	0.239	0.56	0.46	0.271	0.19
1996	0.376	0.405	0.421	0.193	0.405	0.137	0.405	0.52	0.429	0.216	0.552	0.225	0.239	0.512	0.431	0.254	0.188
1997	0.353	0.355	0.401	0.201	0.375	0.135	0.375	0.496	0.394	0.223	0.505	0.211	0.24	0.465	0.401	0.237	0.187
1998	0.33	0.305	0.381	0.209	0.345	0.133	0.344	0.471	0.36	0.23	0.459	0.196	0.24	0.417	0.372	0.22	0.186
1999	0.307	0.255	0.361	0.217	0.315	0.131	0.314	0.447	0.326	0.237	0.412	0.182	0.241	0.37	0.342	0.203	0.185
2000	0.284	0.205	0.341	0.224	0.285	0.129	0.283	0.422	0.292	0.244	0.366	0.168	0.241	0.322	0.313	0.186	0.183
2001	0.441	0.568	0.543	0.35	0.421	0.235	0.514	0.545	0.403	0.39	0.5	0.425	0.374	0.56	0.499	0.409	0.304
2002	0.298	0.395	0.428	0.263	0.393	0.259	0.381	0.438	0.371	0.315	0.397	0.326	0.302	0.449	0.409	0.254	0.31
2003	0.273	0.372	0.413	0.27	0.413	0.228	0.307	0.434	0.354	0.255	0.364	0.316	0.248	0.483	0.411	0.245	0.268
2004	0.262	0.343	0.333	0.234	0.314	0.148	0.29	0.401	0.287	0.23	0.335	0.327	0.239	0.415	0.376	0.216	0.259
2005	0.294	0.316	0.4	0.21	0.343	0.133	0.31	0.437	0.344	0.251	0.374	0.313	0.236	0.417	0.375	0.23	0.282
2006	0.357	0.418	0.425	0.315	0.401	0.275	0.377	0.444	0.411	0.333	0.433	0.372	0.327	0.455	0.396	0.34	0.358
2007	0.366	0.42	0.451	0.319	0.407	0.279	0.391	0.436	0.417	0.334	0.439	0.378	0.339	0.459	0.407	0.329	0.365
2008	0.37	0.421	0.384	0.31	0.409	0.28	0.397	0.446	0.426	0.34	0.445	0.379	0.34	0.438	0.399	0.317	0.354
2009	0.366	0.422	0.379	0.307	0.403	0.285	0.388	0.445	0.413	0.351	0.435	0.369	0.337	0.429	0.398	0.32	0.353

Table A3 – Correlations of contextual variables across country and school-leaver cohort combinations (N=255)

	VET	EPL	PMR	UNEMP	GPD
VET	1	-	-	-	-
EPL	-0.06	1	-	-	-
PMR	0.06	0.36	1	-	-
UNEMP	-0.09	0.28	0.26	1	-
GPD	0.13	0	-0.34	-0.46	1

Table A4 – Prestige of the first job: focus on PMR–gender interaction: coefficients

	Model 3 (Table 2.3) + Gender*PMR
Level 1 variables - Individuals	
Female (ref. Male)	-2.54**
Parental education (ref. Primary/lower sec.)	
Upper secondary	1.42**
Tertiary	3.41**
Level of education (ref. Primary/lower sec.)	
Upper secondary general	3.86**
Upper secondary vocational	3.84**
Tertiary	16.80**
Compulsory military service (ref. No)	0.59**
Level 2 variables - Country*cohort of exit ETS	
Employment Protection Legislation	1.44**
Product Market Regulation	2.09*
Vocational Orientation ETS	5.26**
Interaction	
Sex*Product Market Regulation	5.18**
Constant	31.15**
Unexplained variance level 2	1.05
ICC (intra-class correlation)	0.00996
N subjects	87,558
N country*cohort of exit ETS	255

Significance levels **p<0.01, * p<0.05

The model control for unemployment rate (15-64) and GDP trends.

CHAPTER 3

Table A5 – Small Hsiao tests of the IIA assumption for the multinomial logistic models analysing contractual mobility (Table 3.2 – N=20,050)

Omitted Cat.	Log lik.(full)	Log lik.(omit.)	Chi2	df	p
		Model 1			
Permanent	-5179.19	-5162.77	32.84	28	0.24
Unemployment	-7111.86	-7098.38	26.97	28	0.52
Inactivity	-8250.87	-8239.41	22.93	28	0.74
		Model 2			
Permanent	-5149.48	-5129.99	38.98	36	0.34
Unemployment	-7025.94	-7008.82	34.23	36	0.55
Inactivity	-8189.12	-8171.84	34.56	36	0.54
		Model 3			
Permanent	-5167.88	-5148.31	39.13	40	0.51
Unemployment	-7065.78	-7050.97	29.62	40	0.89
Inactivity	-8146.75	-8131.03	31.45	40	0.83
		Model 4			
Permanent	-5131.76	-5110.13	43.25	38	0.26
Unemployment	-6996.72	-6977.74	37.97	38	0.47
Inactivity	-8113.88	-8099.69	28.39	38	0.87
		Model 5			
Permanent	-5102.3	-5082.42	39.76	42	0.57
Unemployment	-6935.64	-6916.71	37.86	42	0.65
Inactivity	-8065.16	-8047.5	35.3	42	0.76

Ho: Odds (Outcome-J vs Outcome-K) are independent of other alternatives

Table A6 – Small Hsiao tests of the IIA assumption for the multinomial logistic models analysing occupational mobility (Table 3.3 – N=13,833)

Omitted Cat.	Log lik.(full)	Log lik.(omit.)	Chi2	df	p
		Model 1			
Upward	-2686.18	-2679.2	13.95	14	0.45
Downward	-3631.66	-3626.15	11.02	14	0.68
		Model 2			
Upward	-2726.95	-2719.18	15.53	18	0.63
Downward	-3706.42	-3699.41	14.03	18	0.73
		Model 3			
Upward	-2789.99	-2782.12	15.74	20	0.73
Downward	-3643.55	-3637.14	12.81	20	0.89
		Model 4			
Upward	-2680.27	-2670.76	19.02	19	0.46
Downward	-3634.83	-3628.41	12.84	19	0.85
		Model 5			
Upward	-2746.12	-2736.55	19.14	21	0.58
Downward	-3678.24	-3667.97	20.53	21	0.49

Ho: Odds (Outcome-J vs Outcome-K) are independent of other alternatives

Table A7 – Small Hsiao tests of IIA assumption for the multinomial logistic models analysing the relation between contractual and occupational mobility (Table 3.4 – N=13,833)

Omitted Cat.	Log lik.(full)	Log lik.(omit.)	Chi2	df	p
		Model 1			
Upward	-2681.3	-2676.32	9.97	15	0.82
Downward	-3586.36	-3580.41	11.89	15	0.69
		Model 2			
Upward	-2694.36	-2684.45	19.81	19	0.41
Downward	-3642.58	-3634.89	15.38	19	0.7
		Model 3			
Upward	-2757.09	-2744.81	24.54	22	0.32
Downward	-3600.84	-3590.44	20.81	22	0.53
		Model 4			
Upward	-2757.43	-2747.77	19.32	21	0.56
Downward	-3643.24	-3634.16	18.16	21	0.64
		Model 5			
Upward	-2791.25	-2777.98	26.54	24	0.33
Downward	-3659.26	-3647.94	22.64	24	0.54

Ho: Odds (Outcome-J vs Outcome-K) are independent of other alternatives

Table A8 – Multinomial logistic models: Inactivity VS Temporary employment

	M1	M2	M3	M4	M5
Female (ref. Male)	1.21***	1.21***	1.23***	1.20***	1.23***
Parental education (ref. Primary/lower sec.)					
Upper secondary	0.13	0.08	0.04	0.08	0.04
Tertiary	-0.01	-0.03	-0.04	-0.03	-0.04
Level of education (ref. Primary/lower sec.)					
Upper secondary	-0.07	-0.12	-0.29**	-0.14	-0.29**
Tertiary	-0.57**	-0.61***	-0.90***	-0.64***	-0.90***
Field of study (ref. General program)					
Social sciences and humanities	-0.22	-0.2	-0.05	-0.18	-0.05
Hard sciences and technical disciplines	-0.27	-0.27	-0.13	-0.25	-0.13
Health and welfare	-0.53**	-0.50**	-0.39**	-0.48**	-0.39**
Age in 2009	-0.02	-0.01	-0.01	-0.01	-0.01
Time since last exit from ETS	0.12***	0.12***	0.09***	0.12***	0.09***
Macro indicators (country*year)					
Total unemployment rate		0.09**	0.07***	0.09**	0.07***
Age divide (youth unemp – tot unemp)		-0.03	-0.07***	-0.03	-0.07***
GDP per capita		0.11*	0.02	0.11*	0.03
% Temporary employment		-0.03**	-0.04***	-0.02*	-0.04***
EPL regular			-0.28***		-0.26**
Epl-Gap			**-0.17**		**-0.19**
Unions strength				**0.09**	**0.05**
Constant	-1.70***	-1.97**	1.04	-2.31**	0.75
Observations	20,050	20,050	20,050	20,050	20,050
Macro Area FE	YES	YES	YES	YES	YES

Significance levels *** p<0.01, ** p<0.05, * p<0.1 (clustered standard errors)

Table A9 – Growth curve models for analysing the ISEI score: full table reporting the results plotted in Figure 4.1 (Italy: N individuals=3,153; N monthly-spells=354,524 – Netherlands: N individuals=2,340, N monthly-spells=264,060)

	ITALY	THE NETHERLANDS
Career duration	0.151***	0.504***
Career duration2	0.001	-0.013***
Entry Cohort (ref. 1950-1965)		
1966-1980	-0.094	1.165
1981-1995	0.327	-1.588
Social Origins (ref. EGP V,VI,VII)		
Medium (III,IV)	-0.681	0.379
High (I,II)	5.551***	8.316***
*Interaction Career duration*Cohort*		
Career duration*1966-1980	0.018	-0.227
Career duration*1981-1995	0.103	0.235
*Interaction Career duration2*Cohort*		
Career duration2*1966-1980	0.001	0.006
Career duration2*1981-1995	-0.021***	-0.046***
*Interaction Career duration*Social Origins*		
Career duration*Medium	0.043	-0.037
Career duration*High	0.363**	-1.188***
*Interaction Career duration2*Social Origins*		
Career duration2*Medium	0.006***	-0.010*
Career duration2*High	-0.034***	0.068***
*Interaction Social Origins*Cohort*		
Medium (III, IV)*1966-1980	2.375**	0.309
Medium (III, IV)*1981-1995	2.220**	1.095
High (I, II)*1981-1995	1.401	-4.290**
High (I, II)*1966-1980	-0.685	-3.474*
*Interaction Career duration*Social Origins*Cohort*		
Career duration*Medium (III, IV)*1966-1980	0.183*	0.558***
Career duration*Medium (III, IV)*1981-1995	0.026	-0.381*
Career duration*High (I, II)*1966-1980	0.134	1.003***
Career duration*High (I, II)*1981-1995	-0.486**	0.798***
*Interaction Career duration2*Social Origins*Cohort*		
Career duration2*Medium (III, IV)*1966-1980	-0.029***	-0.030***
Career duration2*Medium (III, IV)*1981-1995	-0.006*	0.048***
Career duration2*High (I, II)*1966-1980	-0.014**	-0.056***
Career duration2*High (I, II)*1981-1995	0.035***	-0.018**
Education (ref. <upper sec.)		
Upper secondary	14.693***	5.761***
Tertiary	36.174***	17.431***
*Interaction Career duration*Education*		
Career duration*Upper secondary	-0.022	0.109
Career duration*Tertiary	-0.247	0.241

continued

continued

*Interaction Education*Cohort*		
Upper secondary*1966-1980	-4.016***	-0.146
Upper secondary*1981-1995	-6.056***	-0.014
Tertiary*1966-1980	-5.211***	0.764
Tertiary*1981-1995	-4.003**	3.630**
*Interaction Career duration*Education*Cohort*		
Career duration*Upper secondary*1966–1980	0.191*	0.032
Career duration*Upper secondary*1981–1995	0.253**	0.278
Career duration*Tertiary*1966–1980	0.32	0.042
Career duration*Tertiary*1980–1995	0.182	0.118
Intercept	30.568	34.806
Variance Between (level 2)	101.865	170.326
Variance Within (level 1)	6.694	21.723
Variance slope (career dur)	0.977	2.384
Covariance intercept-slope	-4.051	-10.529

Significance levels: *** p<0.01, ** p<0.05, * p<0.1

Table A10 – Growth curve models for analysing the ISEI score: Full table reporting the results plotted in Figure 4.2 (Italy: N individuals=3,153; N monthly-spells=354,524 – Netherlands: N individuals=2,340, N monthly-spells=264,060)

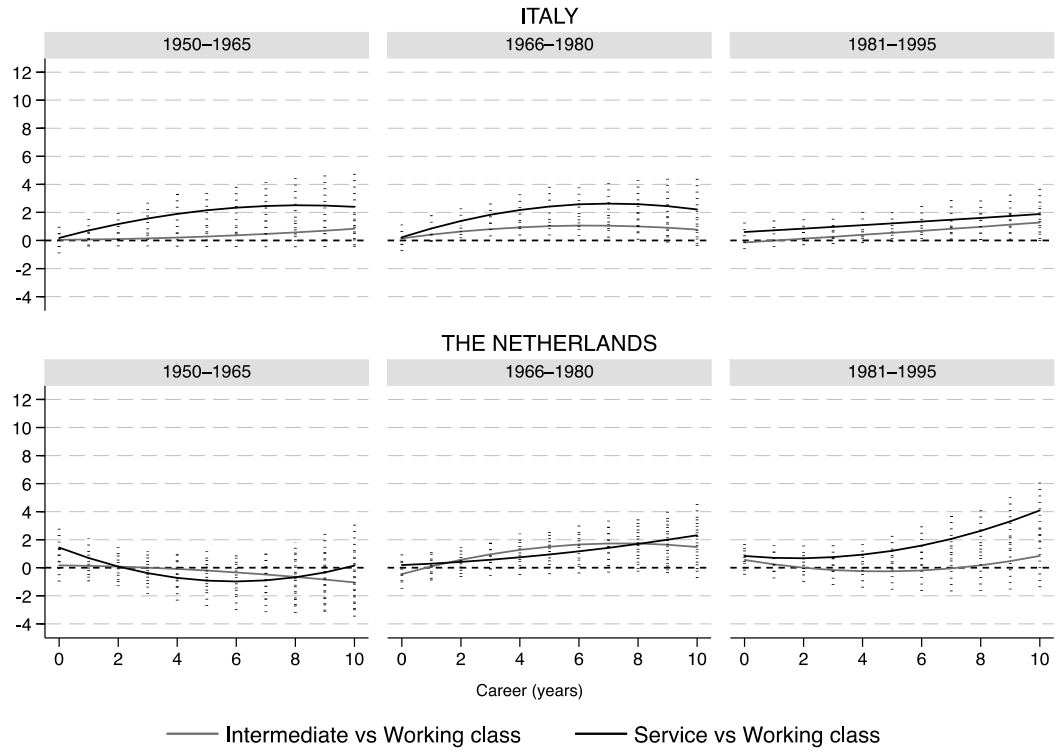
	ITALY	THE NETHERLANDS
Career duration	1.293***	2.181***
Career duration2	0.001	-0.013***
Entry Cohort (ref. 1950-1965)		
1966-1980	2.359***	-1.606
1981-1995	1.762***	1.355
*Interaction Career duration*Cohort*		
Career duration*1966-1980	-0.027	0.074
Career duration*1981-1995	0.052	0.438*
*Interaction Career duration2*Cohort*		
Career duration2*1966-1980	0.001	0.006
Career duration2*1981-1995	-0.021***	-0.046***
Social Origins (ref. EGP V,VI,VII)		
Medium (III,IV)	0.047	0.174
High (I,II)	0.18	1.440*
*Interaction Career duration*Social Origins*		
Career duration*Medium	0.015	-0.026
Career duration*High	0.566***	-0.814***
*Interaction Career duration2*Social Origins*		
Career duration2*Medium	0.006***	-0.010*
Career duration2*High	-0.034***	0.069***
*Interaction Social Origins*Cohort*		
Medium (III, IV)*1966-1980	0.102	-0.624
Medium (III, IV)*1981-1995	-0.188	0.388
High (I, II)*1981-1995	0.045	-1.247
High (I, II)*1966-1980	0.43	-0.606
*Interaction Career duration*Social Origins*Cohort*		
Career duration*Medium (III, IV)*1966-1980	0.272***	0.615***
Career duration*Medium (III, IV)*1981-1995	0.117	-0.330*
Career duration*High (I, II)*1966-1980	0.114	0.904***
Career duration*High (I, II)*1981-1995	-0.450**	0.638***
*Interaction Career duration2*Social Origins*Cohort*		
Career duration2*Medium (III, IV)*1966-1980	-0.029***	-0.030***
Career duration2*Medium (III, IV)*1981-1995	-0.005*	0.048***
Career duration2*High (I, II)*1966-1980	-0.014**	-0.056***
Career duration2*High (I, II)*1981-1995	0.035***	-0.018**
Education (ref. <upper sec.)		
Upper secondary	0.606	1.096*
Tertiary	1.027	2.602***
*Interaction Career duration*Education*		
Career duration*Upper secondary	0.510***	0.363***
Career duration*Tertiary	1.081***	1.049***
*Interaction Education*Cohort*		
Upper secondary*1966-1980	0.589	0.114
Upper secondary*1981-1995	0.431	0.853
Tertiary*1966-1980	3.119***	-0.398

continued

continued

Tertiary*1981-1995	1.690*	2.493**
*Interaction Career duration*Education*Cohort*		
Career duration*Upper secondary*1966–1980	0.034	0.037
Career duration*Upper secondary*1981–1995	0.01	0.279
Career duration*Tertiary*1966–1980	0.053	0.177
Career duration*Tertiary*1980–1995	-0.031	0.385*
ISEI first job	0.984***	0.880***
*Interaction Career duration*ISEI first job*	-0.037***	-0.048***
*Interaction ISEI first job*Cohort*		
ISEI first job*1966–1980	-0.080***	0.044*
ISEI first job*1981–1995	-0.057***	-0.060**
*Interaction Career duration*ISEI first job*Cohort*		
Career duration*ISEI first job*1966-1980	0.001	-0.007
Career duration*ISEI first job*1981-1995	0.002	-0.007
Intercept	0.314	4.07
Variance Between (level 2)	13.095	38.811
Variance Within (level 1)	6.694	21.723
Variance slope (career dur)	0.848	1.894
Covariance intercept-slope	-0.648	-2.497

Significance levels: *** p<0.01, ** p<0.05, * p<0.1



Source: Own elaboration based on ILFI and FSDP data

Figure A2 – Growth curve models: predicted average differences in ISEI along the first 10 years of occupational career (and 95% confidence intervals) comparing youngsters hailing from the service and the intermediate classes with youngsters hailing from working class. Net of educational attainment and ISEI at labour market entry